

# SAFETY DATA SHEET

# Multisciences Human IL-22 High Sensitivity ELISA Kit

# Section 1. Identification

GHS product identifier Code: Multisciences Human IL-22 High Sensitivity ELISA Kit, EK122HS Other means of identification: Not available Trade name: Human IL-22 High Sensitivity ELISA Kit Supplier/Manufacturer 108 Xiang Yuan Road, Gongshu Intellect Information Industry Park, Hangzhou In case of emergency: Multisciences: 400-6721-600

# Section 2. Hazards identification

Section 2. Hazards ident		
OSHA/HCS status:	Multisciences anti-Human IL-22 detect antibody(100X)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	Multisciences Human IL-22 Standard (lyophilized)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for
		employees and other users of this product.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for
	Multisciences Stop Solution	employees and other users of this product. While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910. 1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture:	Multisciences anti-Human IL-22 detect antibody(100X)	Not classified.
	Multisciences Human IL-22 Standard (lyophilized)	Not classified.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not classified.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not classified.
	Multisciences Stop Solution	Not classified.
GHS label elements Signal word	Multisciences anti-Human IL-22 detect antibody(100X)	No signal word.
	Multisciences Human IL-22 Standard (lyophilized)	No signal word.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No signal word.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	No signal word.
	Multisciences Stop Solution	No signal word.
Hazard statements	Multisciences anti-Human IL-22 detect antibody(100X)	No known significant effects or critical hazards.
	Multisciences Human IL-22 Standard (lyophilized)	No known significant effects or critical hazards.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No known significant effects or critical hazards.
	Multisciences Streptavidin-HRP (100x) and	No known significant effects or critical hazards.
	Substrate Reagent Multisciences Stop Solution	No known significant effects or critical hazards.
Precautionary statements General	Multisciences anti-Human IL-22 detect antibody(100X)	Not applicable.
	Multisciences Human IL-22 Standard (lyophilized)	Not applicable.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	Multisciences Streptavidin-HRP (100x) and	Not applicable.

Substrate Reagent



	Multisciences Stop Solution	Not applicable.
Prevention	Multisciences anti-Human IL-22 detect antibody(100X)	Not applicable.
	Multisciences Human IL-22 Standard (lyophilized)	Not applicable.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not applicable.
	Multisciences Stop Solution	Not applicable.
Response	Multisciences anti-Human IL-22 detect antibody(100X)	Not applicable.
	Multisciences Human IL-22 Standard (lyophilized)	Not applicable.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not applicable.
	Multisciences Stop Solution	Not applicable.
Storage	Multisciences anti-Human IL-22 detect antibody(100X)	Not applicable.
	Multisciences Human IL-22 Standard (lyophilized)	Not applicable.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not applicable.
	Multisciences Stop Solution	Not applicable.
Disposal	Multisciences anti-Human IL-22 detect antibody(100X)	Not applicable.
	Multisciences Human IL-22 Standard (lyophilized)	Not applicable.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not applicable.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not applicable.
	Multisciences Stop Solution	Not applicable.
Supplemental label elements	Multisciences anti-Human IL-22 detect antibody(100X)	None known.
	Multisciences Human IL-22 Standard (lyophilized)	None known.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	None known.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	None known.
	Multisciences Stop Solution	None known.
Hazards not otherwise classified	Multisciences anti-Human IL-22 detect antibody(100X)	None known.
	Multisciences Human IL-22 Standard (lyophilized)	None known.
	Multisciences PBS Buffer with Tween 20 (Assay,	None known.
	Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and	None known.
	Substrate Reagent Multisciences Stop Solution	None known.

# Section 3. Composition/information on ingredients

Substance/mixture: Mixture		
Ingredient name	%	CAS number
Multisciences Human IL-22 Standard	99.9-100	-

Any concentration shown as a range is to protect confidentiality or is due to batch variation. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

Description of necessary first aid measures



Eye contact	Multisciences anti-Human IL-22 detect antibody(100X)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses.
	Multisciences Human IL-22 Standard (lyophilized)	Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Multisciences Stop Solution	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Multisciences anti-Human IL-22 detect antibody(100X) Multisciences Human IL-22 Standard (lyophilized)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Multisciences PBS Buffer with Tween 20 (Assay,	Remove victim to fresh air and keep at rest in a position comfortable
	Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and	for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable
	Substrate Reagent Multisciences Stop Solution	for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	Multisciences anti-Human IL-22 detect	Flush contaminated skin with plenty of water. Remove contaminated
	antibody(100X) Multisciences Human IL-22 Standard (lyophilized)	clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Multisciences PBS Buffer with Tween 20 (Assay,	Flush contaminated skin with plenty of water. Remove contaminated
	Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and	clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated
	Substrate Reagent Multisciences Stop Solution	clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	Multisciences anti-Human IL-22 detect antibody(100X)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by
	Multisciences Human IL-22 Standard (lyophilized)	medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by
	Multisciences Stop Solution	medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Most important symptoms/effect	ts, acute and delayed Potential acute he	
Eye contact	Multisciences anti-Human IL-22 detect antibody(100X)	No known significant effects or critical hazards.
	Multisciences Human IL-22 Standard (lyophilized)	No known significant effects or critical hazards.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No known significant effects or critical hazards.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent Multisciences Stop Solution	No known significant effects or critical hazards. No known significant effects or critical hazards.
Inhalation	Multisciences anti-Human IL-22 detect	No known significant effects or critical hazards.
Inhalation	antibody(100X)	
	Multisciences Human IL-22 Standard (lyophilized) Multisciences PBS Buffer with Tween 20 (Assay,	No known significant effects or critical hazards. No known significant effects or critical hazards.
	Diluent or Washing buffer)	
	Multisciences Streptavidin-HRP (100x) and	No known significant effects or critical hazards.



	Substrate Reagent Multisciences Stop Solution	No known significant effects or critical hazards.
Skin contact	Multisciences anti-Human IL-22 detect antibody(100X)	No known significant effects or critical hazards.
	Multisciences Human IL-22 Standard (lyophilized)	No known significant effects or critical hazards.
	Multisciences PBS Buffer with Tween 20 (Assay,	No known significant effects or critical hazards.
	Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and	No known significant effects or critical hazards.
	Substrate Reagent	No known significant effects of childen hazards.
	Multisciences Stop Solution	No known significant effects or critical hazards.
Ingestion	Multisciences anti-Human IL-22 detect antibody(100X)	No known significant effects or critical hazards.
	Multisciences Human IL-22 Standard (lyophilized)	No known significant effects or critical hazards.
	Multisciences PBS Buffer with Tween 20 (Assay,	No known significant effects or critical hazards.
	Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and Substrate Reagent	No known significant effects or critical hazards.
	Multisciences Stop Solution	No known significant effects or critical hazards.
Over-exposure signs/symptoms		
Eye contact	Multisciences anti-Human IL-22 detect	No specific data.
	antibody(100X) Multisciences Human IL-22 Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay,	No specific data.
	Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and	No specific data.
	Substrate Reagent Multisciences Stop Solution	No specific data.
Inhalation	Multisciences anti-Human IL-22 detect antibody(100X)	No specific data.
	Multisciences Human IL-22 Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	No specific data.
	Multisciences Stop Solution	No specific data.
Skin contact	Multisciences anti-Human IL-22 detect antibody(100X)	No specific data.
	Multisciences Human IL-22 Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay,	No specific data.
	Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and Substrate Reagent	No specific data.
	Multisciences Stop Solution	No specific data.
Ingestion	Multisciences anti-Human IL-22 detect antibody(100X)	No specific data.
	Multisciences Human IL-22 Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	No specific data.
	Multisciences Stop Solution	No specific data.
Indication of immediate medical	attention and special treatment needed	, if necessary, see toxicological information (Section 11)

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

# Section 5. Fire-fighting measures

Extinguishing media		
Suitable extinguishing media	Multisciences anti-Human IL-22 detect antibody(100X)	Use an extinguishing agent suitable for the surrounding fire.
	Multisciences Human IL-22 Standard (lyophilized)	Use an extinguishing agent suitable for the surrounding fire.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Use an extinguishing agent suitable for the surrounding fire.
	Multisciences Streptavidin-HRP (100x) and	Use an extinguishing agent suitable for the surrounding fire.
	Substrate Reagent	
	Multisciences Stop Solution	Use an extinguishing agent suitable for the surrounding fire.



Unsuitable extinguishing media	Multisciences anti-Human IL-22 detect antibody(100X) Multisciences Human IL-22 Standard (lyophilized)	None known. None known.
	Multisciences PBS Buffer with Tween 20 (Assay,	None known.
	Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and	None known.
	Substrate Reagent	
	Multisciences Stop Solution	None known.
Specific hazards arising from the chemical	Multisciences anti-Human IL-22 detect antibody(100X)	In a fire or if heated, a pressure increase will occur and the container may burst.
	Multisciences Human IL-22 Standard (lyophilized)	In a fire or if heated, a pressure increase will occur and the container may burst.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	In a fire or if heated, a pressure increase will occur and the container may burst.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	In a fire or if heated, a pressure increase will occur and the container may burst.
	Multisciences Stop Solution	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	Multisciences anti-Human IL-22 detect antibody(100X)	No specific data.
	Multisciences Human IL-22 Standard (lyophilized)	No specific data.
	Multisciences PBS Buffer with Tween 20 (Assay,	No specific data.
	Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and Substrate Reagent	No specific data.
	Multisciences Stop Solution	No specific data.
Special protective actions for fire-fighters	Multisciences anti-Human IL-22 detect antibody(100X)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving
	Multisciences Human IL-22 Standard (lyophilized)	any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving
	Multisciences Stop Solution	any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Multisciences anti-Human IL-22 detect antibody(100X)	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Multisciences Human IL-22 Standard (lyophilized)	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece
	Multisciences Stop Solution	operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

Personal precautions, protective equipment and emergency proceduresFor non-emergency personnelNo action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas.<br/>Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put<br/>on appropriate personal protective equipment.For emergency respondersIf specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable<br/>and unsuitable materials. See also the information in "For non- emergency personnel".Environmental precautionsAvoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the<br/>relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).



contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry,

#### Methods and materials for containment and cleaning up Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Small spill Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or Large spill confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Section 7. Handling and storage Precautions for safe handling Multisciences anti-Human IL-22 detect Put on appropriate personal protective equipment (see Section 8). **Protective measures** antibodv(100X) Put on appropriate personal protective equipment (see Section 8). Multisciences Human IL-22 Standard Put on appropriate personal protective equipment (see Section 8). (lyophilized) Put on appropriate personal protective equipment (see Section 8). Multisciences PBS Buffer with Tween 20 Put on appropriate personal protective equipment (see Section 8). (Assay, Diluent or Washing buffer) Put on appropriate personal protective equipment (see Section 8). Multisciences Streptavidin-HRP (100x) and Put on appropriate personal protective equipment (see Section 8). Substrate Reagent Put on appropriate personal protective equipment (see Section 8). Multisciences Stop Solution Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Multisciences anti-Human IL-22 detect Eating, drinking and smoking should be prohibited in areas where this Advice on general occupational material is handled, stored and processed. Workers should wash hands antibody(100X) hygiene and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Multisciences Human IL-22 Standard Eating, drinking and smoking should be prohibited in areas where this (lyophilized) material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Multisciences PBS Buffer with Tween 20 Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands (Assay, Diluent or Washing buffer) and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Multisciences Streptavidin-HRP (100x) and Eating, drinking and smoking should be prohibited in areas where this Substrate Reagent material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Multisciences Stop Solution Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures Multisciences anti-Human IL-22 detect Store in accordance with local regulations. Store in original container Conditions for safe storage antibodv(100X) protected from direct sunlight in a dry, cool and well-ventilated area. including any incompatibilities away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry. Multisciences Human IL-22 Standard Store in accordance with local regulations. Store in original container (lyophilized) protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry. Multisciences PBS Buffer with Tween 20 Store in accordance with local regulations. Store in original container (Assay, Diluent or Washing buffer) protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental



Multisciences Streptavidin-HRP (100x) and Substrate Reagent

Multisciences Stop Solution

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry,

# Section 8. Exposure controls/personal protection

Control parameters Occupational exposure limits None

Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measures	
Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side- shields.
Skin protection	
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the based on known or anticipated exposure levels, the

hazards of the product and the safe working limits of the selected respirator.

# Section 9. Physical and chemical properties

,	1 1	
Physical state	Multisciences anti-Human IL-22 detect antibody(100X)	Liquid.
	Multisciences Human IL-22 Standard (lyophilized)	Solid
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Liquid.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Liquid.
	Multisciences Stop Solution	Liquid.
Color	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.



	Multisciences Streptavidin-HRP (100x) and	Not available.
	Substrate Reagent Multisciences Stop Solution	Not available.
Odor	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Flash point	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Auto-ignition temperature	Multisciences anti-Human IL-22 detect	Not available.
	antibody(100X) Multisciences Human IL-22 Standard (Iyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Flammable limits	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Molecular weight	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Molecular formula	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
рН	Multisciences anti-Human IL-22 detect antibody(100X)	7.0-7.2
	Multisciences Human IL-22 Standard (lyophilized)	Not available
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	7.0-7.2
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	7.0-7.2
	Multisciences Stop Solution	1.1-1.3
Boiling/condensation point	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard (lyophilized)	Not available.



	Multisciences PBS Buffer with Tween 20	Not available.
	(Assay, Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and	Not available.
	Substrate Reagent Multisciences Stop Solution	Not available.
		No
Melting/freezing point	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Relative density	Multisciences anti-Human IL-22 detect	Not available.
heldive density	antibody(100X) Multisciences Human IL-22 Standard	Not available.
	(lyophilized) Multisciences PBS Buffer with Tween 20	Not available.
	(Assay, Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and	Not available.
	Substrate Reagent	
	Multisciences Stop Solution	Not available.
Vapor pressure	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard	Not available.
	(lyophilized) Multisciences PBS Buffer with Tween 20	Not available.
	(Assay, Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and	Not available.
	Substrate Reagent Multisciences Stop Solution	Not available.
Vapor density	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Volatility	Multisciences anti-Human IL-22 detect	Not available.
volatility	antibody(100X) Multisciences Human IL-22 Standard	Not available.
	(lyophilized) Multisciences PBS Buffer with Tween 20	Not available.
	(Assay, Diluent or Washing buffer)	
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Evaporation rate	Multisciences anti-Human IL-22 detect	Not available.
	antibody(100X) Multisciences Human IL-22 Standard	Not available.
	(lyophilized) Multisciences PBS Buffer with Tween 20	Not available.
	(Assay, Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and	Not available.
	Substrate Reagent Multisciences Stop Solution	Not available.
Viscosity	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.
Solubility	Multisciences anti-Human IL-22 detect	Not available.
Joiubility	antibody(100X)	



	Multisciences Human IL-22 Standard (lyophilized) Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and Substrate Reagent Multisciences Stop Solution	Not available. Not available. Not available. Not available.				
Physical/chemical properties comments	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.				
	Multisciences Human IL-22 Standard	Not available.				
	(lyophilized) Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.				
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.				
	Multisciences Stop Solution	Not available.				
Section 10. Stability and reactivity						
Reactivity	Multisciences anti-Human IL-22 detect antibody(100X)	No specific test data related to reactivity available for this product or its ingredients.				
	Multisciences Human IL-22 Standard (lyophilized) Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.				
	Multisciences Streptavidin-HRP (100x) and	No specific test data related to reactivity available for this product or				

its ingredients.

No specific data.

No specific data.

Multisciences Stop Solution No specific test data related to reactivity available for this product or its ingredients. Multisciences anti-Human IL-22 detect The product is stable. **Chemical stability** antibody(100X) Multisciences Human IL-22 Standard The product is stable. (lyophilized) Multisciences PBS Buffer with Tween 20 The product is stable. (Assay, Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and The product is stable. Substrate Reagent Multisciences Stop Solution The product is stable. Multisciences anti-Human IL-22 detect Under normal conditions of storage and use, hazardous reactions Possibility of hazardous reactions antibody(100X) will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Multisciences Human IL-22 Standard Under normal conditions of storage and use, hazardous reactions (lyophilized) will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Multisciences PBS Buffer with Tween 20 Under normal conditions of storage and use, hazardous reactions (Assay, Diluent or Washing buffer) will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Multisciences Streptavidin-HRP (100x) and Under normal conditions of storage and use, hazardous reactions Substrate Reagent will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Multisciences Stop Solution Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Multisciences anti-Human IL-22 detect No specific data. Conditions to avoid antibody(100X) Multisciences Human IL-22 Standard No specific data. (lyophilized) Multisciences PBS Buffer with Tween 20 No specific data. (Assay, Diluent or Washing buffer)

Incompatible materials	Multisciences anti-Human IL-22 detect No specific data. antibody(100X)			
	Multisciences Human IL-22 Standard (lyophilized)	No specific data.		
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	No specific data.		

Substrate Reagent

Multisciences Stop Solution

Multisciences Streptavidin-HRP (100x) and

Substrate Reagent



Multisciences Streptavidin-HRP (100x) and Substrate Reagent Multisciences Stop Solution

d No specific data. No specific data.

Hazardous decomposition products

Multisciences anti-Human IL-22 detect antibody(100X)

Multisciences Human IL-22 Standard (lyophilized)

Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)

Multisciences Streptavidin-HRP (100x) and Substrate Reagent

Multisciences Stop Solution

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous

decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

Information on toxicological effects Acute toxicity: Not available. Irritation/Corrosion: Not available. Sensitization: Not available. Mutagenicity: Not available. Carcinogenicity: Not available. Reproductive toxicity: Not available. Teratogenicity: Not available. Specific target organ toxicity (single exposure): Not available. Specific target organ toxicity (repeated exposure): Not available. Aspiration hazard: Not available. Information on the likely routes of exposure: Not available.

Potential acute health effects Eye contact: Not available.

Inhalation: Not available. Skin contact: Not available. Ingestion: Not available.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Not available. Inhalation: Not available. Skin contact: Not available. Ingestion: Not available.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure: Not available. Potential immediate effects: Not available. Potential delayed effects: Not available. Long term exposure: Not available. Potential immediate effects: Not available. Potential delayed effects: Not available. Potential chronic health effects: General: Not available. Carcinogenicity: Not available. Mutagenicity: Not available. Teratogenicity: Not available. Developmental effects: Not available.



Fertility effects: Not available. Numerical measures of toxicity Acute toxicity estimates: Not available. Interactive effects: Not available. Other information: Not available. Section 12. Ecological information Toxicity: Not available. Persistence and degradability: Not available. Bioaccumulative potential: Not available. Mobility in soil Soil/water partition: coefficient (Koc) Multisciences anti-Human IL-22 detect antibody(100X)

Koc)	Multisciences anti-Human IL-22 detect antibody(100X)	Not available.
	Multisciences Human IL-22 Standard (lyophilized)	Not available.
	Multisciences PBS Buffer with Tween 20 (Assay, Diluent or Washing buffer)	Not available.
	Multisciences Streptavidin-HRP (100x) and Substrate Reagent	Not available.
	Multisciences Stop Solution	Not available.

Mobility: Not available.

Other adverse effects: No known significant effects or critical hazards.

#### Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### Section 14. Transport information

UN number UN proper shipping name	DOT Classification Not available. Not available.	TDG Classification Not available. Not available.	Mexico Classification Not available. Not available.	ADR/RID Not available. Not available.	IMDG Not available. Not available.	IATA Not available. Not available.
	Not available.	Not available.	Not available.	Not available.	Not available.	Not available.
Packing group	-	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

#### Section 15. Regulatory information

U.S. Federal regulations: TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): Not determined. Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed Clean Air Act Section 602 Class I Substances: Not listed Clean Air Act Section 602 Class II Substances: Not listed DEA List I Chemicals (Precursor Chemicals): Not listed DEA List II Chemicals (Essential Chemicals): Not listed SARA 302/304 Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Multisciences Substrate Reagent with hydrogen peroxide	0-1	Yes.	1000	106.1	1000	106.1

SARA 304 RQ: 68292000 lbs / 31004568 kg

SARA 311/312 Classification: Not applicable.

Composition/information on ingredients: No products were found.

#### State regulations

Massachusetts: None of the components are listed.

New York: None of the components are listed.

New Jersey: None of the components are listed.

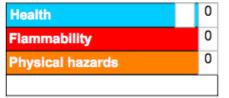


Pennsylvania: None of the components are listed. Section 15. Regulatory information International regulations Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed. Montreal Protocol (Annexes A, B, C, E) Not listed. Stockholm Convention on Persistent Organic Pollutants Not listed. Rotterdam Convention on Prior Inform Consent (PIC) Not listed. **UNECE Aarhus Protocol on POPs and Heavy Metals** Not listed. Canada Multisciences anti-Human IL-22 detect Not controlled under WHMIS (Canada). WHMIS (Canada) antibody(100X) Multisciences Human IL-22 Standard Not controlled under WHMIS (Canada). (lyophilized) Multisciences PBS Buffer with Tween 20 Not controlled under WHMIS (Canada). (Assay, Diluent or Washing buffer) Multisciences Streptavidin-HRP (100x) and Not controlled under WHMIS (Canada). Substrate Reagent Multisciences Stop Solution Not controlled under WHMIS (Canada).

Canadian lists Canadian NPRI: None of the components are listed. CEPA Toxic substances: None of the components are listed Canada inventory: Not determined.

## Section 16. Other information

Hazardous Material Information System (U.S.A.)



The customer is responsible for determining the PPE code for this material. National Fire Protection Association (U.S.A.)



History

Date of issue/Date of revision: 9/11/2016 Date of previous issue: No previous validation. Version: 1

Section 16. Other information

Key to abbreviations:

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations



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