
MATERIAL SAFETY DATA SHEET**Product name:**

SERPINA1 (Human) ELISA Kit

Catalog number:

KA0458

1. Composition/Information on Ingredients

Component	Size
Antibody coated microwells	96 wells
Human A1AT Standard	20 µg
Biotinylated A1AT	1 vial
MIX Diluent Concentrate (10x)	30 ml
Wash Buffer Concentrate (20x)	30 ml
Streptavidin-Peroxidase Conjugate (SP Conjugate)	90
Chromogen Substrate	8 ml
Stop Solution:	12 ml

2. Hazards Identification

<u>Known Hazardous Components</u>	<u>CAS Number</u>	<u>Percent</u>
Proclin 300:	96118-96-6	
MIX Diluent Concentrate (10x)		0.04%

<u>Known Hazardous Components</u>	<u>CAS Number</u>	<u>Percent</u>
Sodium Azide:	26628-22-8	
Wash Buffer Concentrate (20x)		0.02%
Biotinylated Antibody		0.02%

<u>Known Hazardous Components</u>	<u>CAS Number</u>	<u>Percent</u>
3,3', 5,5' – tetramethylbenzidine:	54827-17-7	
Chromogen Substrate		5 %

<u>Known Hazardous Components</u>	<u>CAS Number</u>	<u>Percent</u>
Hydrochloric acid:	7647-01-0	
Stop Solution		0.5 N

<u>Known Hazardous Components</u>	<u>CAS Number</u>	<u>Percent</u>
Peroxidase Stabilizer:	N/A	
Streptavidin-Peroxidase Conjugate (SP Conjugate)		100 %

3. First Aid Measures

First aid personnel should ensure self-protection.

General informations:	Because of the low concentrations of the ingredients seeing a doctor is not necessary.
In case of skin contact:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
In case of eye contact:	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.
In case of ingestion:	Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
In case of inhalation:	Immediately remove the causality from exposure and move to fresh air. If the breathing stops, immediately apply mechanical ventilation and apply an oxygen mask if available. Arrange medical treatment.

4. Fire Fighting Measures

Flammability of the product:

Fire Hazard; Flash point 250 °C or 482 °F

Explosion Hazard: If this material in powder form, it is capable of creating a dust explosion.

Suitable extinguishing media:

Use an extinguishing agent suitable for the surrounding fire.

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.

5. Accidental Release Measures

Personal precautions

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Small spill

Stop leak if without risk. Move containers for spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

6. Handling and Storage

Handling

Put on appropriate personal protective equipment. 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. Keep in the original containers; expiry date is printed on the kit box label. Take care to keep workplace clean and dry. The substances used should not be present at the place of work in quantities above those required for carrying out the work. Do not leave containers open.

Storage

Components of kits require store between the following temperatures: 2 to 8 °C or -20 °C. Refer components label for details. Keep containers 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.

Specific use

The product is intended for research use only. Intended for professional use only.

7. Exposure controls/personal protection

Hands

Chemical-resistance, impervious gloves complying with an approved standard should be worn at all times when handling

chemical and biological products if a risk assessment indicates this is necessary.

Eyes

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.

Skin

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 kit.

8. Physical and Chemical Properties

Data for kit component solution (not for individual ingredients)

Physical State:	Liquid
Appearance:	Clear to yellow solutions
pH:	Neutral except for the Stop Solution (Acidic solution)
Solubility:	Soluble in water
Vapour Pressure:	N/A
Vapour Density:	N/A
Evaporation Rate:	N/A
Boiling Point:	N/A
Flash point:	N/A
Flammability:	N/A
Oxidizing properties:	N/A
Relative density:	N/A
Viscosity:	N/A
Additional parameters:	N/A

9. Stability and Reactivity

Stable.

However note expiry date printed on the kit box label. Store at 2-8 °C or -20 °C refer to components label and replace the components at this temperature at the end of the working procedure.

Conditions to avoid: Heating above room temperature, freezing.

Materials to avoid: Generally use only clean glass and plastic suitable for laboratory use for handling the kit components.

None know materials to be avoided.

Dangerous reactions: In the case of fire see chapter 5. No dangerous reactions known.

Further information: Note that Stop Solution contains 0.5 N Hydrochloric Acid (HCL) and has a corrosive effect.

10. Toxicological Information

- Because of the small size of the container and the low concentrations of hazardous ingredients, the toxicological risks are minor.
- Toxicological experiments have not been done on the kit components.
- The following toxicological information is for the hazardous ingredient in pure form for Pierce:
Pierce Peroxidase Conjugate Stabilizer used in SP Conjugate.
Acute toxicity
After inhalation: May be harmful after inhalation and irritate the respiratory tract.
After swallowing: Harmful if swallowed
After skin contact: Irritation of the skin, danger of skin absorption.
After eye contact: May cause eye irritation
Animal toxicological data LD50 (oral, Rat 4700 mg/kg, LD50)
Human toxicological data: No data available.

11. Ecological information

No known significant effects or critical hazards.

Further ecological information

Do not allow to enter waters, waste water or soil.

Due to the small size of the containers and the low concentrations of hazardous ingredients, risks are minor.

12. Disposal guidelines

Product: Must be disposed in compliance with the respective national regulations.

Packaging: Must be disposed in compliance with the respective national regulations.

13. Transport information

Regulatory information:	UN Number	Proper shipping name	Classes	Packaging group
DOT Classification:	Not regulated	--	--	--
IATA –DGR Class:	Not available	Not available	Not available	Not available

14. Regulatory information

No single component contains a hazardous ingredient in an amount that requires identification and labeling according to EC directives.

15. Other

For research use only.

For Professional use only.

Read instructions for use before using the product. The customer is responsible for determining the PPE code for this material. To the best of our knowledge, the information contained herein is accurate. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.