Elabscience Biotechnology Co., Ltd

MATERIAL SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product name:	**Recombinant Human RANKL/TNFSF11 Protein**
Catalog Number:	PKSH031027
Application:	For research use only
Company:	Elabscience Biotechnology Co., Ltd
Address:	Building B18,Biomedical Park, #858 Gaoxin Road, Donghu Hi-Tech Development Area, Wuhan, Hubei, China
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SECTION 2 HAZARDS IDENTIFICATION

According to GHS, no hazards are applicable or no data available.

SECTION 3 INFORMATION ON INGREDIENTS

The product does not contain any known hazard ingredient. We recommend handling all chemicals with caution.

SECTION 4 FIRST-AID MEASURES

4.1 Skin Exposure:

In case of contact, immediately wash skin with soap and copious amounts of water. Irritation persists, call a physician.

4.2 Eye Exposure:

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. If irritation persists, call a physician.

4.3 Inhalation Exposure:

If inhaled, remove to fresh air. If necessary, get medical attention.

4.4 Oral Exposure:

Rinse mouth with water. Do not induce vomiting unless directed to do by medical personnel. Never give anything by mouth to an unconscious person. Call a physician.

SECTION 5 FIRE FIGHTING MEASURES

5.1 Extinguishing Media:

Suitable: Water spray, Dry chemical, Carbon dioxide or appropriate foam.

5.2 Firefighting Protective Equipment:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Procedure of Personal Precaution:

Exercise appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust.

6.2 Methods for Cleaning up:

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

6.3 Environmental precautions:

Do not let product enter drains.

SECTION 7 HANDLING AND STORAGE

7.1 Handling:

Wear appropriate protective clothing and safety gloves. Avoid inhalation. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Mechanical exhaust required. Keep away from ignition sources, heat and flame. Incompatibilities: Strong oxidizing agents. No smoking at working site.

7.2 Storage:

Stored at -20 to -80°C. Keep away from heat, sparks, and flame. Keep away from sources of ignition.

7.3 Incompatible:

Strong bases, Strong oxidizing agents, Strong acids.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION EQUIPMENT

8.1 Engineering Controls:

Mechanical exhaust required. Safety shower and eye bath.

8.2 Personal Protective Equipment:

8.2.1 Respiratory: Government approved respirator if needed.

8.2.2 Eye: Chemical safety goggles if needed.

8.2.3 Clothing: Wear appropriate protective clothing.

8.2.4 Hand: Protective gloves.

8.3 Other Protect:

No smoking, drinking and eating at working site. Wash thoroughly after handling.

SECTION 9 PHYSICAL/CHEMIICAL PROPERTIES

9.1 Appearance:

Colorless transparent liquid or lyophilized powder.

9.2 Flash Point (Closed Cup) /°C:

No data available.

9.3 Initial Boiling Point/°C:

No data available.

9.4 pH Value:

No data available.

9.5 Solubility:

No data available.

SECTION 10 STABILITY AND REACTIVITY

10.1 Stability:

Liquid proteins are stable for up to 6 months when stored at -20 to -80°C.

Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

10.2 Materials to Avoid:

Strong oxidizing agents.

10.3 Hazardous Polymerization:

Will not occur.

10.4 Hazardous Decomposition Products:

Carbon oxides, Sodium oxides, Phosphorous oxides, Potassium oxides, Hydrogen chloride gas.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Acute toxicity:

There is no evidence available indicating acute toxicity.

11.2 Skin corrosion/irritation:

No data available.

11.3 Serious eye damage/irritation:

No data available.

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity:

Contains no substances known to be hazardous to the environment.

12.2 Persistence and degradability:

No data available.

12.3 Bioaccumulative potential:

No data available.

12.4 Mobility in soil:

No data available.

SECTION 13 DISPOSAL CONSIDERATION

13.1 Waste treatment methods:

13.1.1 Waste from residues/unused products:

Dispose according to local, state and federal regulations

13.1.2 Contaminated packaging:

Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14 TRANSPORT INFORMATION

14.1 RID/ADR:

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

14.2 IATA:

Non-Hazardous for Air Transport.

14.3 IMO:

Non-Hazardous for Sea Transport.

SECTION 15 REGULATORY INFORMATION

Non-Hazardous for Sea Transport.

SECTION 16 OTHER INFORMATION

16.1 Disclaimer:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.