

Section 1: Product and Company Identification

Product Name	Rat GRP78 ELISA Kit
Catalog Number	SKT-137
Company	StressMarq Biosciences Inc. PO Box 55036 Cadboro Bay Victoria BC V8N4G0 CANADA Tel: 250.294.9065 Fax: 250-294-9025 info@stressmarq.com www.stressmarq.com

Section 2: Chemical Component Information

List of Components	Anti-Rat GRP78 Immunoassay Plate (SKC-137A) Recombinant Rat GRP78 (SKC-137C) Sample and Standard Diluent (SKC-0001) Anti-Rat GRP78 Biotinylated Antibody Concentrate (SKC-0002) Wash Buffer Concentrate (SKC-0003) Anti-Rat GRP78 Biotinylated Antibody Diluent (SKC-137F) Streptavidin Poly HRP Concentrate (SKC-137G) Streptavidin Poly HRP Diluent (SKC-137H) TMB Substrate (SKC-0004) Stop Solution (SKC-0005) Plate Cover (SKC-0009)			
Hazardous Ingredients				
<u>Chemical Name</u>	<u>CAS #</u>	<u>Kit Component</u>	<u>Percent</u>	<u>SARA 313</u>
Hydrochloric Acid	7647-01-0	Stop Solution	< 1.0%	No
EDTA	60-00-4	Blocking Solution	< 0.5%	No
Sodium Hydroxide	1310-73-2	Plate Components	< 1.0%	No
Proclin	55965-84-9	Sample Diluent, Wash Buffer, Antibody Diluent, Plate	< 1.0% per component	No

Section 3: Health Hazards

Emergency Overview	It is recommended that personnel wear safety goggles, gloves and protective clothing at all times. As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical components of this kit and ensure prompt removal from skin, eye, and clothing.
Hydrochloric Acid	Harmful if inhaled, absorbed through skin or swallowed. Irritating to eyes, respiratory system and skin.

Section 4: First Aid Measures

Inhalation	If inhaled, remove to fresh air. Seek medical attention if respiratory symptoms develop.
Skin Contact	Wash thoroughly with soap and water ≥ 15 minutes. If irritation or discomfort develops seek medical attention.
Eye Contact	Rinse eyes with water extensively. Seek medical attention.
Ingestion	Get medical attention immediately. If person is conscious, give a cupful of water.

Section 5: Fire Fighting Measures

Flash Point	N/A
Explosion Limits	N/A
Auto-ignition Temp	N/A
Flammability	N/A
Extinguishing Media	Suitable: Water spray. Carbon Dioxide, dry chemical powder, or appropriate foam.
Firefighting	Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fires conditions.

Section 6: Accidental Release Measures

Cleanup Procedures	Wear appropriate protective clothing. Ventilate area. Contain spill to prevent migration. Absorb on sand or vermiculite, place in sealed container for disposal. Wash area of spill with soap and water.
Waste Disposal	Dispose of in accordance with federal, state, and local regulations.

Section 7: Handling and Storage

Handling	Avoid getting components of this kit on you or in you. Always wear appropriate protective clothing. Always wash hands and other exposed areas thoroughly after using this kit. Do not eat or drink while using this kit. Qualified and experienced professionals should only handle this kit.
Storage	Store according to the package insert instructions.

Section 8: Exposure Controls and Personal Protection

Engineering Controls	No special engineering controls are required when working with this kit. Use with adequate ventilation.
Protective Equipment	Safety glasses are recommended to prevent eye contact. Chemical resistant gloves and a lab coat should be worn to prevent skin contact.

Section 9: Physical and Chemical Properties

<u>Characteristic</u>	<u>Hydrochloric Acid</u>	<u>EDTA</u>	<u>NaOH</u>	<u>Proclin</u>
Appearance	Clear, colorless liquid	Solid	Clear, Colorless liquid	Clear, Colorless liquid
Odor	Pungent	N/A	Odorless	Odorless
Boiling Point	100°C	N/A	1388°C	189°C
Melting Point	0°C	N/A	318.4°C	-40°C
Flash Point	N/A	N/A	N/A	118°C
Ignition temperature	N/A	N/A	N/A	N/A
Density	N/A	N/A	N/A	N/A
Vapor Pressure	Essentially the same as water	N/A	<2.4 kPa	N/A
Solubility in Water	Complete	Soluble in cold water	Soluble	Soluble
pH	0.03	5	13	4.1

Section 10: Stability and Reactivity

Stability	This material is stable until the expiration date on the kit if stored as directed.
Incompatibles	HCL: Cyanides, sulfides, sulfites, and formaldehyde. EDTA: Strong Oxidizers, Metals such as zinc, aluminum, carbon steel, copper, nickel NaOH: Acids, Water, Flammable liquids, Organic halogens, Metals, Aluminum, Zinc, Tin, Leather, Wool, Nitromethane Proclin: Strong Oxidizing agents, Reducing Agents, Amines, Mercaptans
Decomposition	HCl: Hydrogen chloride gas. EDTA: N/A NaOH: Toxic fumes of sodium oxide. Proclin: N/A

Section 11: Toxicological Information

<u>Route of Exposure</u>	
Skin Contact	May cause skin irritation.
Skin Absorption	May be harmful if absorbed through the skin.
Eye Contact	May cause eye irritation.
Inhalation	May be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion	May be harmful if swallowed.
<u>Symptoms of Exposure</u>	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

No data is available.

Section 13: Disposal Considerations

Dispose of waste materials, unused components and contaminated packaging in compliance with country, state, district and local regulations. If unsure of the applicable requirements, contact the authorities for information.

Section 14: Transport Information

<u>U.S. and Canadian Transportation; DOT</u>	
Proper Shipping Name	Chemical Kits
UN Identification Number	3316
Class and Description	9, Miscellaneous
Packing Group	N/A
Hazard Label	Class 9
<u>International Air Transportation (IATA)</u>	
Proper Shipping Name	Chemical Kits
UN Identification Number	3316
Class and Description	9, Miscellaneous
Packing Group	III
Hazard Label	Class 9

Section 15: Regulatory InformationProduct related information

The product is not subject to classification according to the sources of literature known to us.

Observe general safety regulations when handling chemicals.

Safety Statements

HCl: Keep container tightly closed. Keep away from sources of ignition.

EDTA: N/A

NaOH: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Proclin: Corrosive.

Risk Statements

HCL: Explosive when dry. Forms very sensitive explosive metallic compounds. Causes burns.

EDTA: May cause sensitization by skin contact. Irritating to eyes, respiratory system and skin.

NaOH: Causes severe burns.

Proclin: Skin sensitization. Skin corrosion. Eye damage. Acute Toxicity.

U.S. Regulatory Information

Sara Listed: No.

Section 16: Other Information

Disclaimer: For Research Use Only. Not for diagnostic, therapeutic, or other uses.

Further Information: The information contained in this document is accurate to the best of our knowledge and is provided in good faith. This document is intended only as a guide to the appropriate precautionary handling of the materials contained in this kit by properly trained personnel using this kit. Final determination or suitability of any materials is the sole responsibility of the user. StressMarq Biosciences Inc. shall not be held liable for any damage resulting from use or handling of this product.