SAFETY DATA SHEET



SDS No. SDS_smNuc_Eng01

Revised Date: 2025/05/07

1. Identification of the Substance/Mixture and of the Company/Undertaking

- **Product Name:** Serratia marcescens Nuclease, recombinant / Serratia marcescens Nuclease (His-tagged), recombinant
- Product Code: RP-smNuc-S, RP-smNuc-L / RP-NucHis-S, RP-NucHis-L
- **Supplier:** ProteinExpress Co., Ltd. ADDRESS: 2-1-6, Kazusakamatari, Kisarazu-shi, Chiba 292-0818, Japan. TELEPHONE NUMBER: +81-438-52-0112
- Emergency Contact Number: +81-438-52-0112
- Recommended Use and Restrictions on Use: Research chemical

2. Hazards Identification

• GHS Classification: Not classified

• Signal Word: None

Hazard Statements: NonePrecautionary Statements:

- o For laboratory use only.
- Wear appropriate personal protective equipment (see Section 8).
- Wash hands thoroughly after handling.

3. Composition/Information on Ingredients

Ingredient		CAS No.	Concentration	GHS Classification
Serratia	marcescens	(Proprietary)	Trace	(Not classified)
Nuclease				
Tris/HCI		N/A	20 mM	(Not classified)
Sodium Chloride		7647-14-5	20 mM	(Not classified)
Magnesium Chlor	ride	7786-30-3	2 mM	(Not classified)
Glycerol		56-81-5	50%	(Not classified)
Water		7732-18-5	Balance	(Not classified)

4. First Aid Measures

- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- If on skin: Wash with plenty of soap and water.
- If in eyes: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention.

5. Firefighting Measures

- Suitable Extinguishing Media: Water spray, carbon dioxide, foam, dry chemical.
- Specific Hazards Arising from the Chemical: May emit toxic or irritating fumes under fire conditions.
- **Special Protective Equipment for Firefighters:** Wear self-contained breathing apparatus and appropriate protective clothing.

6. Accidental Release Measures

- Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate personal protective equipment (protective goggles, gloves, and clothing). Ensure adequate ventilation. Avoid breathing vapors or mist.
- **Environmental Precautions:** Prevent spillage from entering drains or watercourses. Avoid release to the environment.
- Methods and Materials for Containment and Cleaning Up: Absorb spillage with inert absorbent material (e.g., sand, earth). Collect and place in a suitable container for disposal. Wash contaminated area with soap and water.

7. Handling and Storage

Handling:

- Use with adequate ventilation.
- Wear appropriate personal protective equipment (protective goggles, gloves, and clothing).
- Avoid contact with eyes, skin, and clothing.
- Do not eat, drink, or smoke in work areas.
- Wash hands thoroughly after handling.

Storage:

- Store in a cool, dry, and well-ventilated place.
- Keep away from direct sunlight and heat sources.
- Keep away from incompatible materials.
- Keep container tightly closed.
- Store at recommended storage temperature.

8. Exposure Controls/Personal Protection

- Control Parameters: Not established.
- Exposure Limits: Not established.
- Appropriate Engineering Controls: Provide adequate ventilation.

- Individual Protection Measures, such as Personal Protective Equipment:
 - Respiratory Protection: Use appropriate respiratory protection (e.g., organic vapor respirator, particle filter respirator) if ventilation is inadequate.
 - o **Hand Protection:** Wear appropriate chemical-resistant gloves.
 - o Eye Protection: Wear safety goggles or face shield.
 - Skin and Body Protection: Wear appropriate protective clothing.
 - Hygiene Measures: Wash hands after working with the substance. Wash contaminated clothing before reuse.

9. Physical and Chemical Properties

• Appearance: Colorless clear liquid

Odor: No specific odor or slightly characteristic odor

• **pH:** 8.0

Melting Point/Freezing Point: No data available

Boiling Point and Boiling Range: No data available

Flash Point: No data available

• Evaporation Rate: No data available

• Flammability (solid, gas): Not applicable (liquid)

• Upper/Lower Flammability or Explosive Limits: No data available

Vapor Pressure: No data available
Vapor Density: No data available

• Relative Density: Approximately 1.1 - 1.2 (depending on solution composition)

Solubility(ies): Soluble in water

• Partition Coefficient: n-octanol/water: No data available

• Auto-ignition Temperature: No data available

• **Decomposition Temperature:** No data available

• Viscosity: No data available

10. Stability and Reactivity

- Reactivity: No specific reactivity hazards known.
- Chemical Stability: Stable under normal conditions.
- Possibility of Hazardous Reactions: May react dangerously under certain conditions (e.g., contact with incompatible materials).
- **Conditions to Avoid:** High temperatures, direct sunlight, contact with incompatible materials.
- **Incompatible Materials:** Strong acids, strong bases, oxidizing agents.
- Hazardous Decomposition Products: May emit carbon oxides, nitrogen oxides, hydrogen halides, and other toxic gases upon heating.

11. Toxicological

- Acute Toxicity: Limited data available for oral, dermal, and inhalation routes.
- **Skin Corrosion/Irritation:** May cause mild skin irritation.
- Serious Eye Damage/Irritation: May cause mild eye irritation.
- Respiratory or Skin Sensitization: No data available
- Germ Cell Mutagenicity: No data available
- Carcinogenicity: No known carcinogenic ingredients.
- Reproductive Toxicity: No data available
- Specific Target Organ Toxicity Single Exposure: No data available
- Specific Target Organ Toxicity Repeated Exposure: No data available
- Aspiration Hazard: No data available

12. Ecological Information

- **Ecotoxicity**: Limited data available on aquatic toxicity. Avoid release to the environment.
- Persistence and Degradability: No data available
- Bioaccumulative Potential: No data available
- Mobility in Soil: No data available
- Other Adverse Effects: No data available

13. Disposal Considerations

- Waste Treatment Methods: Dispose of waste in accordance with local, regional, and national regulations. Dispose of through a licensed waste disposal contractor.
- **Contaminated Packaging:** Dispose of contaminated packaging in accordance with local, regional, and national regulations.

14. Transport Information

- **UN Number:** Not applicable
- UN Proper Shipping Name: Not applicable
- Transport Hazard Class(es): Not applicable
- Packing Group: Not applicable
- Environmental Hazards: Not applicable
- Special Precautions for User: Handle with care to avoid damage to containers.

15. Regulatory Information

Not applicable

16. Other Information

• **Disclaimer:** This SDS is prepared based on the best information available at the time of writing. It does not purport to be all-inclusive and shall be used only as a guide. This information is intended as guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification.