Safety Data Sheet

Cat. # BAN0106

TNF-alpha/TNFSF2/TNFa

Size: 50µg
## SECTION 1: Identification

### 1.1. Identification

<table>
<thead>
<tr>
<th>Product form</th>
<th>Mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Recombinant Protein, Lyophilized</td>
</tr>
<tr>
<td>Product code</td>
<td>RecomL</td>
</tr>
</tbody>
</table>

### 1.2. Recommended use and restrictions on use

No additional information available

### 1.3. Supplier

Geno Technology, Inc./ G-Biosciences
9800 Page Avenue
Saint Louis, 63132-1429 - United States
T 800-628-7730 - F 314-991-1504
technical@GBiosciences.com - www.GBiosciences.com

### 1.4. Emergency telephone number

Emergency number: Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

GHS US classification
Not classified

### 2.2. GHS Label elements, including precautionary statements

GHS US labeling
No labeling applicable

### 2.3. Other hazards which do not result in classification

No additional information available

### 2.4. Unknown acute toxicity (GHS US)

Not applicable

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

<table>
<thead>
<tr>
<th>Description of first aid measures</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-aid measures after inhalation</td>
<td>Remove person to fresh air and keep comfortable for breathing.</td>
</tr>
<tr>
<td>First-aid measures after skin contact</td>
<td>Wash skin with plenty of water.</td>
</tr>
<tr>
<td>First-aid measures after eye contact</td>
<td>Rinse eyes with water as a precaution.</td>
</tr>
<tr>
<td>First-aid measures after ingestion</td>
<td>Call a poison center/doctor/physician if you feel unwell.</td>
</tr>
</tbody>
</table>

### 4.2. Most important symptoms and effects (acute and delayed)

No additional information available

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media


### 5.2. Specific hazards arising from the chemical

No additional information available
5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Mechanically recover the product.

Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment.

Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Recombinant Protein, Lyophilized</th>
</tr>
</thead>
<tbody>
<tr>
<td>No additional information available</td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Environmental exposure controls: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
- Protective gloves

Eye protection:
- Safety glasses

Skin and body protection:
- Wear suitable protective clothing

Respiratory protection:
- In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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Odor : No data available
Odor threshold : No data available
pH : No data available
Melting point : No data available
Freezing point : Not applicable
Boiling point : No data available
Flash point : Not applicable
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : Non flammable.
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available
Solubility : No data available
Log Pow : No data available
Auto-ignition temperature : Not applicable
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosion limits : Not applicable
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified
Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
Specific target organ toxicity – single exposure : Not classified
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| Specific target organ toxicity – repeated exposure | Not classified |
| Aspiration hazard | Not classified |
| Viscosity, kinematic | No data available |

**SECTION 12: Ecological information**

| 12.1. Toxicity |
| Ecology - general | The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. |

| 12.2. Persistence and degradability |
| No additional information available |

| 12.3. Bioaccumulative potential |
| No additional information available |

| 12.4. Mobility in soil |
| No additional information available |

| 12.5. Other adverse effects |
| No additional information available |

**SECTION 13: Disposal considerations**

| 13.1. Disposal methods |
| Waste treatment methods | Waste treatment methods. |

**SECTION 14: Transport information**

**Department of Transportation (DOT)**

In accordance with DOT

Not applicable

**Transportation of Dangerous Goods**

Not applicable

**Transport by sea**

Not applicable

**Air transport**

Not applicable

**SECTION 15: Regulatory information**

| 15.1. US Federal regulations |
| Recombinant Protein, Lyophilized |
| Not listed on the United States TSCA (Toxic Substances Control Act) inventory |

| 15.2. International regulations |
| CANADA |
| Recombinant Protein, Lyophilized |
| Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List) |

**EU-Regulations**
National regulations
No additional information available

15.3. US State regulations

SECTION 16: Other information

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.