

**SAFETY DATA SHEET**Revision Date: 2nd February 2022**1. PRODUCT AND COMPANY IDENTIFICATION****1.1 Product Identification****Product Name:** anti-Leu-Enkephalin; neat rabbit antiserum, lyophilized**Product Number:** T-4290

CAS-number: N/A

1.2 Company IdentificationBMA Biomedicals
Division of Chemoforma AG
Rheinstrasse 28-32
CH – 4302 Augst
Switzerland

Telephone: +41 61 811 6222

Fax: +41 61 811 2803

Emergency: +41 61 811 6222 (business hours)

1.3 Recommended use and Restrictions on use

Laboratory reagent, Research Use Only

2. HAZARD(S) IDENTIFICATION**2.1 Classification of the substance****GHS-US Classification in accordance with 29 CFR 1910 (OSHA HCS):** Not dangerous**2.2 GHS Label elements, including precautionary statements**

Not a hazardous substance or mixture. Not dangerous.

3. COMPOSITION / INFORMATION ON INGREDIENTS**3.1 Substance:** Serum

Principal Components	Concentration	CAS No	GHS-US CLASSIFICATION
Rabbit serum	100%		

4. FIRST-AID MEASURES**4.1 Description of First Aid Measures****General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.**Inhalation:** Move person to fresh air. If not breathing, give artificial respiration. Consult a physician.**Ingestion:** Rinse mouth with water.

In case of skin contact: Wash with soap and water.

In case of eye contact: Rinse thoroughly with water for at least 15 minutes; remove contact lenses.**4.2 Important Symptoms/Effects, acute and delayed**

See section 2.2.

4.3 Required treatment

Note to physician: treat symptomatically.



5. FIRE-FIGHTING MEASURES

5.1 Extinguishing agents

Suitable extinguishing agents: Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Sulfur oxides, sodium oxides.

5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. For personal protection see section 8.

6.2 Environmental precautions:

Try to prevent the material from entering drains or water courses, prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleanup:

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed container for disposal.

6.4 Disposal:

Dispose in accordance with local regulation.

6.5 References to other sections:

See Section 8 Exposure Controls and personal protection.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling and hygiene

Avoid contact with skin and eyes, and the formation of dust and aerosols. Provide appropriate exhaust ventilation in work area to prevent vapor buildup. Do not breathe dust, mist, vapors, spray. Wash hands and other exposed skin with mild soap and water before eating, drinking, or smoking and when leaving work. Wash contaminated clothing before reusing. See precautions section 2.2.

7.2 Conditions for safe storage, and incompatibilities

Comply with applicable regulations. Keep container closed when not in use, in a dry and well-ventilated place

7.3 Specific end use(s)

Apart from uses listed in Section 1.3, no other specific uses are stipulated.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control Parameters

Components with workplace control parameters:

Contains no substances with occupational exposure limit values.

8.2 Exposure Controls

Appropriate engineering controls: Showers, eyewash stations, ventilation systems.

Personal protective equipment: Avoid all unnecessary exposure by using the following equipment:

Eye protection: Tightly fitting safety goggles.



Skin and body protection: No special protective equipment required other than standard laboratory clothing such as a laboratory coat.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Other information: Do not eat, drink, or smoke during use.

Control of environmental exposure : Prevent further leakage and spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state: Solid powder

Color: off-white to brown

Odor: No data available

Odor threshold: No data available

pH: No data available

Relative evaporation rate: No data available

Melting point: No data available

Freezing point: No data available

Boiling point: No data available

Flash point: No data available

Self-ignition temperature: No data available

Decomposition temperature: No data available

Flammability limits in air: No data available

Vapor Pressure: No data available

Relative vapor density at 20C: No data available

Relative density: No data available

Density: No data available

Solubility: Soluble in water

Log Pow: No data available

Log Kow: No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

Explosive properties: No data available

Oxidizing properties: No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity: No data available

10.2 Chemical stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions: No data available.

10.4 Conditions to avoid: No data available.

10.5 Incompatible materials: Strong oxidizing agents. Strong acids. Strong bases.

10.6 Hazardous decomposition products: None known based on information supplied.
In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

Chemical name	LD50 oral	LD50 dermal	LC50 inhalation
Rabbit serum	n/a	n/a	n/a

Skin: May cause allergic skin irritation.

Eye damage/irritation: May cause allergic reaction.

Respiratory or skin sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity: No data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.



ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by OSHA.

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.

Additional information: RTECS: Not available.

To the best of our knowledge, the chemical, physical and toxicological properties have not been further investigated.

12. ECOLOGICAL INFORMATION

Information on ecological effects

12.1 Toxicity:

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Rabbit serum	none	none	none	none

12.2 Persistence and degradability: no data available

12.3 Bioaccumulative potential: no data available

12.4 Mobility in soil: no data available

12.5 Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal..

13. DISPOSAL CONSIDERATIONS

13.1 Waste disposal methods: This material, as supplied, is not a hazardous waste according to US federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

13.2 Contaminated packaging: Do not re-use empty containers.

13.3 US EPA Waste Number: n/a

14. TRANSPORT INFORMATION

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.



ADR: Not dangerous goods.

15. REGULATORY INFORMATION

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements for the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

US State Right-to-know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Rabbit serum					

International Regulations

WHMIS Note: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H300 + H310 – Fatal if swallowed or in contact with skin – does not apply

H400 – Very toxic to aquatic life – does not apply

H410 – Very toxic to aquatic life with long lasting effects – does not apply

Disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It is the users' responsibility to determine the suitability of this information for the adoption of safety precautions as may be necessary. Chemoforma AG or its Division BMA Biomedicals shall not be held liable for any damage resulting from the handling of the above product.