



Safety Data Sheet (SDS)

SECTION 1 – Identification

Product Name: Animal Free Recombinant Human Brain-Derived Neurotrophic Factor (BDNF)

Synonyms: BDNF, Abrineurin

Catalog Number: HBDNF

Recommended Use: For research use only (RUO). Not for human or veterinary diagnostic, therapeutic, or clinical use.

Manufacturer Contact:

Pacific Coast Biologics, INC.

2360 Eastman Ave, Suite 101

Oxnard, CA 93030, USA

Email: support@pacificcoastbio.com

Emergency Contact: Seek local medical attention or contact regional poison control center.

SECTION 2 – Hazard Identification

Classification (GHS):

Not classified as hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

Signal Word: None

Hazard Statements:

- May cause mild skin, eye, or respiratory irritation.
- Proteinaceous materials should be handled as potentially bioactive.

Precautionary Statements:

- Avoid inhalation, ingestion, and direct contact.
- Use gloves, lab coat, and safety glasses when handling.
- Wash hands thoroughly after use.



SECTION 3 – Composition/Information on Ingredients

Product: Recombinant Human BDNF (Animal Free)

CAS Number: Not assigned

EC Number: Not assigned

Formulation: Lyophilized recombinant protein

Concentration: Microgram quantities per vial

SECTION 4 – First Aid Measures

General: Seek medical attention if symptoms occur. Provide SDS to medical personnel.

- **Inhalation:** Move to fresh air. If symptoms develop, seek medical advice.
 - **Skin Contact:** Wash thoroughly with soap and water. Remove contaminated clothing.
 - **Eye Contact:** Flush eyes with water for at least 15 minutes. Seek medical attention if irritation persists.
 - **Ingestion:** Rinse mouth with water. Do not induce vomiting unless instructed. Seek medical attention if unwell.
-

SECTION 5 – Firefighting Measures

Extinguishing Media: Water spray, CO₂, foam, or dry chemical.

Special Hazards: Product is non-flammable, but combustion may produce carbon oxides and nitrogen oxides.

Protective Equipment: Wear SCBA and full protective clothing.

SECTION 6 – Accidental Release Measures

- Avoid creating aerosols.
- Wear appropriate protective equipment.
- Absorb spill with paper towels or inert absorbent.



- Clean area with water and disinfectant.
 - Dispose of waste per local regulations.
-

SECTION 7 – Handling and Storage

Handling:

- Use only in designated laboratory areas.
- Avoid inhalation, ingestion, or direct contact.
- Follow standard laboratory safety practices.

Storage:

- Store lyophilized material at $-20\text{ }^{\circ}\text{C}$ or below.
 - Store reconstituted solutions at $-80\text{ }^{\circ}\text{C}$ in aliquots.
 - Avoid repeated freeze-thaw cycles.
 - Keep tightly sealed.
-

SECTION 8 – Exposure Controls/Personal Protection

Exposure Limits: No occupational exposure limits established.

Engineering Controls: Use in a biosafety cabinet or well-ventilated space.

Personal Protective Equipment (PPE):

- Eye Protection: Safety glasses or goggles
 - Skin Protection: Gloves and lab coat
 - Respiratory Protection: Not normally required; use NIOSH-approved respirator if aerosolization is possible
-

SECTION 9 – Physical and Chemical Properties

- **Appearance:** Lyophilized white to off-white powder, or clear solution upon reconstitution



- **Odor:** Odorless
 - **Solubility:** Soluble in water and biological buffers
 - **pH:** Below pH 3.0 when reconstituted in purified water
 - **Stability:** Stable under recommended storage
-

SECTION 10 – Stability and Reactivity

- **Stability:** Stable under recommended storage
 - **Conditions to Avoid:** Excessive heat, light, and repeated freeze-thaw cycles
 - **Incompatibilities:** Strong oxidizing agents
 - **Decomposition Products:** Carbon oxides, nitrogen oxides under fire conditions
-

SECTION 11 – Toxicological Information

- **Acute Toxicity:** No data available
 - **Skin/Eye Irritation:** May cause mild irritation
 - **Sensitization:** No data available
 - **Carcinogenicity/Mutagenicity/Reproductive Effects:** No data available
 - **Other:** Handle as potentially bioactive
-

SECTION 12 – Ecological Information

- No data available.
 - Not expected to be hazardous to the environment in small laboratory quantities.
-

SECTION 13 – Disposal Considerations

- Dispose of in accordance with federal, state, and local regulations.



- Decontaminate waste prior to disposal.

SECTION 14 – Transport Information

UN Number: Not regulated

Proper Shipping Name: Non-hazardous research material

Hazard Class: Not regulated

Packing Group: Not applicable

Transport Note: Product is stable at ambient temperatures

SECTION 15 – Regulatory Information

- OSHA HCS: Not classified as hazardous
- TSCA: Not listed
- SARA Title III: Not listed
- California Proposition 65: Not listed

SECTION 16 – Other Information

Prepared by: Pacific Coast Biologics, INC.

Date Prepared: 09/12/2025

Revision Number: 1.0

This SDS summarizes our best knowledge regarding safe handling of this material. It is not a warranty of product properties. Users are responsible for safe use under their conditions.