SAFETY DATA SHEET

SECTION 1 - Product and Company Identification

Product name: **WHAMM (Human) Recombinant Protein (P01)**

Catalog ID: **H00123720-P01**

Company: Abnova (Taiwan) Corporation

Address: No. 326-8, Sec. 4, Zhongzheng Rd. Zhongli Dist., Taoyuan City 320 Taiwan

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SECTION 2 - Hazards Identification

Classification of the substance or mixture

This product does not meet the criteria for classification in any hazard class according to Regulation (EC) No. 1272/2008 [CLP], GHS or 29 CFR 1910.1200 [OSHA].

Label elements

This product does not need to be labelled in accordance with EC directives or respective national laws.

Other hazards

This mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3 - Composition/Information on Ingredient

Mixture

Supplied in 50 mM Tris-HCl, 10 mM reduced Glutathione, pH 8.0

Component		Concentration
Tris-HCl ($C_4H_{11}NO_3$ HCl)	CAS No.: 1185-53-1 EC No.: 214-684-5	50 mM
Reduced glutathione	CAS No.: 70-18-8 EC No.: 200-725-4	10 mM

SECTION 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

SECTION 5 - Firefighting Measures

Fire Extinguisher Type: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Fire Fighting Procedure: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is noncombustible.

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 0

SECTION 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

SECTION 7 - Handling and Storage

Handling: Wash hands thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Do not eat, drink or smoke when using this product.

Storage: Stored at -80°C.

SECTION 8 - Exposure Controls/Personal Protection

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

SECTION 9 - Physical and Chemical Properties

Appearance:	Liquid
pH:	pH 8.0
Boiling point:	Not available
Vapor density:	Not available
Vapor pressure:	Not available
Density (g cm-3):	Not available
Flash point:	Not available
Explosion limits:	Not available

Auto ignition temperature: Not available

SECTION 10 - Stability and Reactivity

Stability: Stable.

Conditions to avoid: Heating above room temperature, freezing, contaminating.

Materials to avoid: Generally use only clean glass and plastic suitable for laboratory use for handling the antibody preparation.
Note that individual ingredients are incompatible with acids, heavy metals, metallic salts, bromine, dimethylsulfate, copper, dichloromethane, carbondisulfide and peptidases.

Dangerous reactions: In the case of fire see section 5.

SECTION 11 - Toxicological Information

Epidemiology: No information found

Teratogenicity: No information found

Reproductive Effects: No information found

Mutagenicity: No information found

Neurotoxicity: No information found

SECTION 12 - Ecological Information

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

No data available

Other adverse effects

No data available

SECTION 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

SECTION 14 - Transport Information

Overland transportation (ADR/RID): As a mixture, the substance is subject to no limitations.
Transatlantic transportation (IMDG): As a mixture, the substance is subject to no limitations.
Air transportation (ICAO/IATA): As a mixture, the substance is subject to no limitations.

SECTION 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

The product does not contain a hazardous ingredient in an amount that requires identification and labeling according to EC directives.

Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture.

SECTION 16 - Other Information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Abnova shall not be held liable for any damage resulting from handling or from contact with the above product.