MATERIAL SAFETY DATA SHEET (MSDS)

1.0 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION
Product Description: All Recombinant HumanKine® expressed in Human Cell Line (See products below)
Activin A, beta NGF, BMP-2, BMP-4, BMP-7, Cystatin C, EPO, FGF-4, FGF-7 (KGF), FGF-8b, FGF-basic-T3, FLT3 Ligand, G-CSF, GM-CSF, HGF, HGH, HSA, IFN alpha 2A, IFN alpha 2B, IFN beta, IFN gamma, IL-1 beta, IL-2, IL-3, IL-4, IL-6, IL-7, IL-9, IL-10, IL-12, IL-17 (IL-17a), IL-17f, IL-23, IL-27, IL-28A, IL-28B, IL-29, LEFTY-1, LEF, M-CSF, Noggin, OSM, PDGFaa, PDGFbb, pro-IGF-II, Pleiotrophin (PTN), SCF, SHH, TGF beta 1, TGF beta 2, TGF beta 3, TNF alpha, TPO, VEGF121, VEGF165, and Wnt3A.
Company Identification: Proteintech Group, Inc.
5400 Pearl Street, Suite 300
Rosemont, IL 60018, USA
Phone: 1-888-478-4522

2.0 COMPOSITION/INFORMATION ON INGREDIENTS
(See Section 8.0, "Exposure Controls/Personal Protection," for exposure guidelines)

3.0 HAZARDS IDENTIFICATION AND POTENTIAL HEALTH EFFECTS
EYE CONTACT: May cause eye irritation, including redness, tearing, and possible abrasions.
SKIN CONTACT: May consist of corrosive material and can cause burns and skin irritation.
INHALATION: Inhalation of high concentrations of dust may cause nasal or lung irritation. Inhalation of large quantities can produce gastrointestinal irritation and vomiting.
INGESTION: Material can be irritating to mucous membranes and respiratory tract.

4.0 FIRST AID MEASURES
EYE CONTACT: Flush eyes with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Then seek immediate medical attention.
SKIN CONTACT: Immediately wash with plenty of soap and water for 15 minutes. Remove contaminated clothing.
INHALATION: If inhaled, supply fresh air. If breathing becomes difficult, call a physician. In case of unconsciousness, place patient on side for transportation. If not breathing, give artificial respiration.

5.0 FIRE FIGHTING MEASURES
Large fires should be fought with water or alcohol-resistant foam. Firefighters should wear protective equipment and self-contained breathing apparatus. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

6.0 ACCIDENTAL RELEASE MEASURES
Use eye protection, gloves, and apron. Implement appropriate precautions to minimize direct contact with skin or eyes and prevent inhalation of dust. Clean up: Sweep up, place in bag, and hold for disposal. Ventilate area and wash site after material is picked up.

7.0 HANDLING AND STORAGE
HANDLING: Use eye protection. Avoid inhalation. Avoid contact with eyes, skin, and clothing. Wear personal protective equipment.
STORAGE: Keep tightly closed. Store in properly labeled containers. See product data sheet for more information on handling and storage.

8.0 EXPOSURE CONTROLS / PERSONAL PROTECTION
EYE PROTECTION: Safety glasses with side-shields.
SKIN PROTECTION: Wear lightweight protective clothing and gloves that cannot be penetrated by chemicals or oil.
INHALATION: In case of insufficient ventilation wear suitable respiratory equipment.
ENGINEERING CONTROLS: Ensure adequate ventilation, especially in confined areas.

9.0 CHEMICAL AND PHYSICAL PROPERTIES
PHYSICAL STATE: Solid lyophilized powder
pH: N/A
BOILING POINT: N/A
MELTING POINT: N/A
DECOMPOSITION TEMP: N/A
SOLUBILITY: N/A
OXIDIZING PROPERTIES: N/A
FLASH POINT: N/A
WATER CONTENT: N/A

10.0 STABILITY AND REACTIVITY
CONDITIONS TO AVOID: No information available.
MATERIALS TO AVOID: No information available.
HAZARDOUS DECOMPOSITION: No information available.
HAZARDOUS POLYMERIZATION: Does not spontaneously polymerize.

11.0 TOXICOLOGICAL INFORMATION
EYE CONTACT: May cause eye irritation. SKIN CONTACT: May cause skin irritation. INHALATION: May cause irritation of respiratory tract. INGESTION: May be harmful if swallowed.

12.0 ECOLOGICAL INFORMATION
ECOTOXICITY EFFECTS: No information available.
BIODEGRADATION: Inherently biodegradable.
BIOACCUMULATION: Does not bioaccumulate.
MOBILITY: No information available.

13.0 DISPOSAL INFORMATION
Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

14.0 TRANSPORTATION INFORMATION
TRANSPORTATION: DOT/IATA/IMDG
Non-hazardous for any form of transportation.

15.0 REGULATORY INFORMATION
This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. Safety, health, and environmental regulations/legislation specific to the substance or mixture. No Chemical Safety Assessment data available. A chemical safety assessment was not carried out for this product.

16.0 OTHER INFORMATION
Disclaimer: For research use only. Not intended for human or animal diagnostic or therapeutic use.

For lab use only, not for diagnostics or therapeutic work.

FOR LAB RESEARCH USE ONLY, NOT FOR USE IN HUMANS OR ANIMALS