www.neobiolab.com
info@neobiolab.com
888.754.5670, +1 617.500.7103 United States
0800.088.5164, +44 020.8123.1558 United Kingdom

HMGB1 Human, Hi-5

Catalog #:PRPS-617

For research use only.

Description:HMG1 Human Recombinant fused to an 8 aa His-Tag at C-terminus produced in High Five insect cells is a single, glycosylated, polypeptide chain (amino acids 1-215) containing 223 amino acids and having a molecular mass of 25 kDa.The HMGB1 is purified by proprietary chromatographic techniques.

Synonyms:HMG1, HMG3, SBP-1, Amphoterin, HMGB1, High-Mobility Group Box 1.

Source: Hi-5 Insect Cells.

Physical Appearance: Sterile Filtered colorless solution.

Amino Acid Sequence:MGKGDPKKPR GKMSSYAFFV QTCREEHKKK HPDASVNFSE FSKKCSERWK TMSAKEKGKF EDMAKADKAR YEREMKTYIP PKGETKKKFK DPNAPKRPPS AFFLFCSEYR PKIKGEHPGL SIGDVAKKLG EMWNNTAADD KQPYEKKAAK LKEKYEKDIA AYRAKGKPDA AKKGVVKAEK SKKKKEEEED EEDEEDEEEE EDEEDEDEEE DDDDELEHHH HHH.

Purity: Greater than 90% as determined by SDS-PAGE.

Formulation:
The HMG1 solution (1mg/ml) contains 20mM Tris-HCl pH-8, 1mM EDTA, 0.5mM DTT and 10% glycerol.

Stability:
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Avoid multiple freeze-thaw cycles.

Usage:
NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drμgs, agricultural or pesticidal products, food additives or household chemicals.

Introduction:
HMGB1 is an abundant chromatin-binding protein found in eukaryotic cell nucleus and acts in the assembly of nucleoprotein complexes. Inside the cell, HMGB1 binds to DNA and is involved in transcriptional regulation. Outside the cell, HMGB1 acts as a cytokine with activities that resemble those of tumor necrosis factor (TNF). HMGB1 is elevated significantly in chronic kidney disease patients and correlates with glomerular filtration rate as well as with markers of inflammation and malnutrition. HMGB1 is involved in Gram-negative sepsis by catalyzing movement of LPS monomers from LPS aggregates to CD14 to initiate a TLR4-mediated proinflammatory response. HMGB1 plays an important role in the relationship between necrosis and malignancy in glioma tumours. HMG1 protein is induced by Mycobacterium bovis BCG. Overexpression of HMGB1 is common in gastrointestinal stromal tumors and is related to the KIT mutation. HMG1 induces growth inhibition and apoptosis in macrophages throμgh RAGE intracellular signaling pathway. The increase of extracellular HMGB1 observed in salivary glands of Sjogren's syndrome patients indicates that HMGB-1 is involved in the inflammatory process of the disease. HMGB-1 together with estrogen increase cell cycle progression in tumor cell lines.

To place an order, please Click HERE.