

Recombinant Human B2MG Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50059

Size: 10ug, 100ug

Protein Name: Beta-2-microglobulin [Cleaved into: Beta-2-microglobulin form pI 5.3]

Synonym: B2M, CDABP0092, HDCMA22P

UniProt ID: P61769

UniProt Link: www.uniprot.org/uniprotkb/P61769/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 119 AA

Molecular Weight: 14 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSRSVALAVLALLSLSGLEAIQRTPKIQVYSRHPAENGKSNFLNCYVSGFHPSDIEVDLLKNGERIEK
VEHSDLSFSKDWSFYLLYYTEFTPTTEKDEYACRVNHVTLTSQPKIVKWDRDM

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Beta-2-microglobulin [Cleaved into: Beta-2-microglobulin form pI 5.3] produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Component of the class I major histocompatibility complex (MHC). Involved in the presentation of peptide antigens to the immune system. Exogenously applied M.tuberculosis EsxA or EsxA-EsxB (or EsxA expressed in host) binds B2M and decreases its export to the cell surface (total protein levels do not change), probably leading to defects in class I antigen presentation (PubMed:25356553).

Subcellular Localization: Secreted . Cell surface . Note=Detected in serum and urine (PubMed:1336137, PubMed:7554280).; Note=(Microbial infection) In the presence of M.tuberculosis EsxA-EsxB complex decreased amounts of B2M are found on the cell surface (PubMed:25356553).

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.