Recombinant B2MG protein (His tag)

Catalog Number	542452
Species	Human
Expression System	E. coli
Accession	P61769
Molecular Weight	Predictes a molecular mass of 13.38 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	21-119
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 21-119 aa (P61769) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Beta-2-microglobulin (B2M) fragment (amino acids 21-119) is a high-purity protein designed for immunological and cell biology research. This 99-amino acid fragment fully encompasses the Ig-like C1-type functional domain, making it an ideal tool for studying specific domain functions in antigen presentation and immune regulation. Beta-2-microglobulin is a critical component of the class I major histocompatibility complex (MHC) in humans, essential for presenting peptide antigens to the immune system. The protein is secreted and localized to the cell surface, where it facilitates immune recognition. Research has shown that Mycobacterium tuberculosis EsxA or EsxA-EsxB complexes can bind B2M and reduce its cell surface expression, potentially impairing class I antigen presentation without altering total protein levels. This recombinant fragment provides researchers with a targeted tool to investigate these specific immunological mechanisms and domain-specific functions.