Recombinant Cynomolgus/Rhesus macaque B2M protein, His-tagged

Cat. No. B2M-488R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Cynomolgus/Rhesus macaque B2M protein (Ile21-Met119), fused to His tag at C-terminus, was expressed in human 293 cells (HEK293).In the region Ile21-Met119, the AA sequence of Cynomolgus and Rhesus macaque B2M are homologus.
Species	Cynomolgus/Rhesus macaque
Source	HEK293
ProteinLength	99
Description	β2 microglobulin is also known as Beta-2-microglobulin (B2M), is a component of MHC class I molecules which belongs to the beta-2-microglobulin family. B2M is present on all nucleated cells (excludes red blood cells). B2M associates not only with the alpha chain of MHC class I molecules, but also with class I-like molecules such as CD1 and Qa. An additional function of B2M is association with the HFE protein, together regulating the expression of hepcidin in the liver which targets the iron transporter ferroportin on the cytoplasmic membrane of enterocytes and macrophages for degradation resulting in decreased iron uptake from food and iron release from recycled red blood cells respectively. Loss of this function causes iron excess and hemochromatosis. Defects in B2M are the cause of hypercatabolic hypoproteinemia (HYCATHYP).

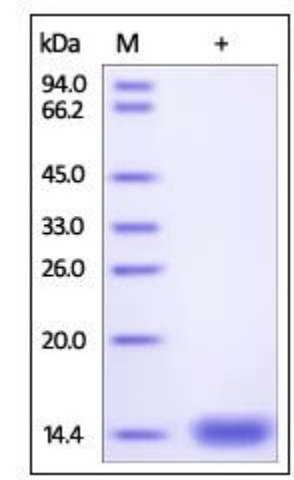
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Form	Lyophilized from 0.22 um filtered solution in PBS, pH7.4, 10% trehalose.
Molecular Mass	The protein has a calculated MW of 12.6 kDa. The protein migrates as 14 kDa under reducing (R) condition (SDS-PAGE).
Endotoxin	Less than 1.0 EU per ug by the LAL method.
Purity	>95% as determined by SDS-PAGE.
Storage	For long term storage, the product should be stored at lyophilized state at -20 centigrade or lower. Please avoid repeated freeze-thaw cycles. This product is stable after storage at: -20 centigrade to -70 centigrade for 12 months in lyophilized state; -70 centigrade for 3 months under sterile conditions after reconstitution.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 ug/ul. Centrifuge the vial at 4℃ before opening to recover the entire contents.

GENE INFORMATION

Gene Name	B2M
Official Symbol	B2M
Synonyms	B2M; beta-2-microglobulin; beta-2-microglobin; beta chain of MHC class I molecules
Gene ID	712428
mRNA Refseq	NM_001047137.1

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Protein Refseq	NP_001040602.1
UniProt ID	Q6V7J5
SDS-PAGE of B2M-488R	 Cynomolgus/Rhesus macaque B2M, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

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