ARG70247
Human beta 2 Microglobulin recombinant protein (His-tagged, C-ter)

Package: 100 µg
Store at: -20°C

Summary

Product Description	HEK293 expressed, His-tagged (C-ter) Human beta 2 Microglobulin recombinant protein.
Tested Reactivity	Hu
Tested Application	Binding, SDS-PAGE
Target Name	beta 2 Microglobulin
Species	Human
A.A. Sequence	Ile21 - Met119 of Human beta 2 Microglobulin (NP_004039.1) with 6X His tag at the C - terminus.
Expression System	HEK293
Alternate Names	Beta-2-microglobulin

Application Instructions

Application Note	Binding activity test: Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human B2M at 2µg/ml (100µl/well) can bind Recombinant Human CD8 alpha with a linear range of 31.25-341 ng/ml.

Properties

Form	Powder
Purification Note	0.22 µm filter sterilized. Endotoxin level is 97% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	Reconstitute to a concentration of 0.1 - 0.5 mg/ml in sterile distilled water.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C for up to one month, at 2-8°C for up to one week. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	B2M
Gene Full Name	beta-2-microglobulin
Background	This gene encodes a serum protein found in association with the major histocompatibility complex (MHC) class I heavy chain on the surface of nearly all nucleated cells. The protein has a predominantly beta-pleated sheet structure that can form amyloid fibrils in some pathological conditions. The encoded antimicrobial protein displays antibacterial activity in amniotic fluid. A mutation in this gene has been shown to result in hypercatabolic hypoproteinemia. [provided by RefSeq, Aug 2014]
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). [UniProt]
Calculated Mw	14 kDa
PTM	Glycation of Ile-21 is observed in long-term hemodialysis patients. [UniProt]
Cellular 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). [UniProt]

Images

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ARG70247 Human beta 2 Microglobulin recombinant protein (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70247 Human beta 2 Microglobulin recombinant protein (His-tagged, C-ter).