Recombinant Human Beta-2-Microglobulin/B2M Protein (HEK293 Cells, His Tag)

Catalog Number: PKSH030949

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

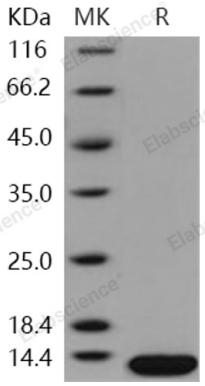
Description

Species	Human
Source	HEK293 Cells-derived Human Beta-2-Microglobulin/B2M protein Met 1-Met 119, with an C-terminal His
Calculated MW	13.5 kDa
Observed MW	13.5 kDa
Accession	NP_004039.1
Bio-activity	Not validated for activity

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

Background

B2M, also known as β2-Microglobulin or CDABP0092, is a component of MHC class I molecules found expression in all nucleated cells (excludes red blood cells). The major function of MHC class I moleculesis is to display fragments of proteins from within the cell to T-cells and cells containing foreign proteins will be attacked. B2 M(β2-Microglobulin) is a low molecular weight protein. It was demonstrated that B2M(β2-Microglobulin) was localized in the membranes of nucleated cells and was found to be associated with HL-A antigens.B2M(β2-Microglobulin) is present in free form in various body fluids and as a subunit of histocompatibility antigens on cell surfaces lateral to theα3 chain. Unlikeα3, β2 has no transmembrane region. Directly above β2 lies the α1 chain, which itself is lateral to the α2. In the absence of B2M(β2 microglobulin), very limited amounts of MHC class I (classical and non-classical) molecules can be detected on the surface. In the absence of MHC class I, CD8 T cells, a subset of T cells involved in the development of acquired immunity cannot develop. Low levels of B2M(β2 microglobulin) can indicate non-progression of HIV.

Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web: www.elabscience.com
Email: techsupport@elabscience.com