Recombinant Protein Technical Manual

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

RPES0527

Product Data:

Product SKU: RPES0527

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_004039.1

Protein Information:

Molecular Mass: 13.5 kDa

AP Molecular Mass: 13.5 kDa

Tag: C-His

Bio-activity:

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Beta-2-Microglobulin; B2M; β2-Microglobulin

Immunogen Information:

Sequence: Met 1-Met 119

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. B2M(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.