Data Sheet (Cat.No.TMPK-00019)

TargetMol

B2M/beta 2-Microglobulin Protein, Human, Recombinant (hFc)

General Information

Synonyms:	Beta-2-microglobulin;B2M/β 2-Microglobulin;β-2-microglobulin;B2M
Protein Construction:	Ile21-Met119
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P61769-1
Molecular Weight:	38.4 kDa (predicted). Due to glycosylation, the protein migrates to 40-50 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

To assess whether beta-2 microglobulin (B2M) has effects on articular chondrocytes that would implicate B2M involvement in osteoarthritis (OA) pathogenesis.The average B2M level in OA synovial fluid is significantly higher than that found in normal synovial fluid. B2M is highly expressed in OA cartilage and synovial fluid compared to normal, and suggest that B2M may have effects on chondrocyte function that could contribute to OA pathogenesis.

Reference

Zhang H, et al. Microarray analysis reveals the involvement of beta-2 microglobulin (B2M) in human osteoarthritis. Osteoarthritis Cartilage. 2002 Dec;10(12):950-60. doi: 10.1053/joca.2002.0850. PMID: 12464555.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481