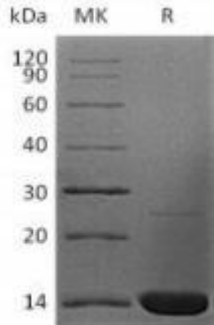


Recombinant Human B2M

Catalog#:P00356 Derived from *E.coli*

DESCRIPTION	<p>Recombinant Human Beta-2- Microglobulin is produced by our <i>E.coli</i> expression system and the target gene encoding Ile21- Met119 is expressed with a 6His tag at the N-terminus.</p> <p>Accession#: P61769</p> <p>Known as: Beta-2- Microglobulin; B2M</p>
FORMULATION	Lyophilized from a 0.2 μ m filtered solution of PBS, pH 7.4.
SHIPPING	<p>The product is shipped at ambient temperature.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
STORAGE	<p>Lyophilized protein should be stored at $<-20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.</p> <p>Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.</p> <p>Aliquots of reconstituted samples are stable at $<-20^{\circ}\text{C}$ for 3 months.</p>
RECONSTITUTION	<p><i>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</i></p> <p><i>It is not recommended to reconstitute to a concentration less than 100μg/ml.</i></p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
QUALITY CONTROL	<p>Mol Mass: 14kDa AP Mol Mass: 14kDa, reducing conditions.</p> <p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.</p>
BACKGROUND	<p>β-2-Microglobulin(B2M) is a secreted protein with 1 Ig-like C1-type (immunoglobulin-like) domain which belongs to the beta-2-microglobulin family. B2M component of major histocompatibility complex (MHC) class I molecules, involved in the presentation of peptide antigens to the immune system. Polymers of beta 2-microglobulin can be found in tissues from patients on long-term hemodialysis. B2M is a protein found on the surface of many cells and plentiful on the surface of white blood cells. Serum B2M concentration is increased in renal diseases, various malignant diseases and some inflammatory and autoimmune disorders. B2M may adopt the fibrillar configuration of amyloid in certain pathologic states. The capacity to assemble into amyloid fibrils is concentration dependent. B2M has been shown as a marker for monitoring inflammatory disease activity and it appears likely to have a destructive role in amyloidosis-related arthritis. B2M might be involved in the OA (osteoarthritis) pathogenesis. Defects in B2M are the cause of hypercatabolic hypoproteinemia. Affected individuals show marked reduction in serum concentrations of immunoglobulin and albumin, probably due to rapid degradation. B2M could be a potential therapeutic target in ovarian cancer.</p>
SDS-PAGE	 <p>The SDS-PAGE gel shows a single prominent band in lane R at approximately 14 kDa, corresponding to the expected molecular weight of B2M. Lane MK is a molecular weight marker lane with bands at 120, 90, 60, 40, 30, 20, and 14 kDa. Lane R contains the recombinant protein sample.</p>