## **Elabscience**®

## Recombinant Cynomolgus B2M/Beta-2-microglobulin Protein (His Tag)

Catalog No. PKSQ050038

Description	
Synonyms	Beta-2-Microglobulin; B2M; β2-Microglobulin
Species	Cynomolgus
Expression_host	Human Cells
Sequence	Ile21-Met119
Accession	Q8SPW0
Mol_Mass	12.5 kDa
AP_Mol_Mass	14 kDa
Tag	C-His
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg 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	-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots
Shipping Formulation	-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.

## Background

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.

## Elabscience<sup>®</sup> SDS-PAGE

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