Recombinant Mouse FCGRT &B2M Heterodimer Protein

Catalog Number: PKSM040322

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

Description	
Species	Mouse
Source	HEK293 Cells-derived Mouse FCGRT & B2M Heterodimer protein Met 1-Ser 297&Met
	1-Met 119(105Ala/Asp), with an C-terminal His
Calculated MW	43.5 kDa
Observed MW	35 & 12 kDa
Accession	P55899&P01887
Bio-activity	Measured by its ability to bind human IgG1 in functional ELISA.
Properties	
Purity	> 95 % 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 $< -20^{\circ}C$ 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	
	Da M
11	6

KDa	Μ
116	-
66.2	-
45.0	
35.0	-
25.0	-
18.4 14.4	=_

> 95 % as determined by reducing SDS-PAGE.

Background

Elabscience®

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.