



b2-Microglobulin (b2M)

Catalog number

M3890-01Z

Supplier

United States Biological

Beta-2-microglobulin (B2M) is found in the serum of normal individuals and in the urine in elevated amounts in patients with Wilson disease, cadmium poisoning, and other conditions leading to renal tubular dysfunction. Like immunoglobulins, prealbumin, and the beta protein found in the amyloid of Alzheimer disease, B2M has a predominantly beta-pleated sheet structure that may adopt the fibrillar configuration of amyloid in certain pathologic states. The protein is a single polypeptide chain of molecular weight 11,600 (human 119aa, chromosome 15). B2M associates with heavy chain of class I MHC antigens on the cell surface. A transient complex of MHC-heavy chain and B2M is known to be assembled into the TAP molecule involving interaction with a number of chaperones. Binding of the processed peptide releases the class I-B2M complex to the cell surface. Absence of binding leads to degradation in the proteasome. Progressive hepatic iron overload, indistinguishable from that observed in HFE, was found only in mice homozygous for the mutated B2M gene.

Applications

Suitable for use in ELISA. Other applications not tested.

Recommended Dilution

ELISA: 1ug/ml coated antigen can be detected by \geq 1ng/ml of antibody
Optimal dilutions to be determined by the researcher.

Storage and Stability

Lyophilized powder may be stored at -20°C. Reconstitute to nominal volume by adding sterile ddH₂O, PBS, aliquot and store at -20°C. Reconstituted product is stable for 12 months at -20°C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

Immunogen

Highly purified recombinant Human Beta-2 MG.

Formulation

Supplied as a lyophilized powder from a solution in 0.01M PBS, pH 7.2.

Purity

Purified by Protein G affinity chromatography.

Specificity

Reacts with natural and recombinant human Beta-2 Microglobulin.

Product Type

Mab

Source



human

Isotype

IgG1

Grade

Affinity Purified

Applications

E

Crossreactivity

Hu

Storage

-20°C