

Rabbit Anti-beta 2 Microglobulin antibody

SL6294R

Product Name:	beta 2 Microglobulin
Chinese Name:	β2-微球蛋白/β2微球蛋白抗体
Alias:	B2M; Beta 2 microglobulin precursor; Beta-2 Microglobulin; Beta chain of mhc class 1 proteins; Hdcma22p; B2MG_HUMAN; Beta 2 microglobin; Beta 2 microglobulin precursor; Beta chain of mhc class 1 proteins; Beta chain of MHC class I molecules; Beta-2-microglobulin form pI 5.3; CDABP0092.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	12kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human beta 2 Microglobulin:51-119/119
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	This gene encodes a serum protein found in association with the major histocompatibility complex (MHC) class I heavy chain on the surface of nearly all nucleated cells. The protein has a predominantly beta-pleated sheet structure that can

form amyloid fibrils in some pathological conditions. A mutation in this gene has been shown to result in hypercatabolic hypoproteinemia. [provided by RefSeq, Sep 2009].

Function:

Component of the class I major histocompatibility complex (MHC). Involved in the presentation of peptide antigens to the immune system.

Subunit:

Heterodimer of an alpha chain and a beta chain. Beta-2-microglobulin is the beta-chain of major histocompatibility complex class I molecules. Polymers of beta 2-microglobulin can be found in tissues from patients on long-term hemodialysis.

Subcellular Location:

Secreted. Detected in serum and urine.

Post-translational modifications:

Glycation of Ile-21 is observed in long-term hemodialysis patients.

DISEASE:

Defects in B2M are the cause of hypercatabolic hypoproteinemia (HYCATHYP) [MIM:241600]. Affected individuals show marked reduction in serum concentrations of immunoglobulin and albumin, probably due to rapid degradation.

Note=Beta-2-microglobulin may adopt the fibrillar configuration of amyloid in certain pathologic states. The capacity to assemble into amyloid fibrils is concentration dependent. Persistently high beta(2)-microglobulin serum levels lead to amyloidosis in patients on long-term hemodialysis.

Similarity:

Belongs to the beta-2-microglobulin family.

Contains 1 Ig-like C1-type (immunoglobulin-like) domain.

SWISS:

P61769

Gene ID:

567

Database links:

Entrez Gene: 567Human

Entrez Gene: 12010Mouse

Entrez Gene: 24223Rat

Omim: 109700Human

SwissProt: P61769Human

SwissProt: P01887Mouse

SwissProt: P07151Rat

<u>Unigene: 534255</u>Human

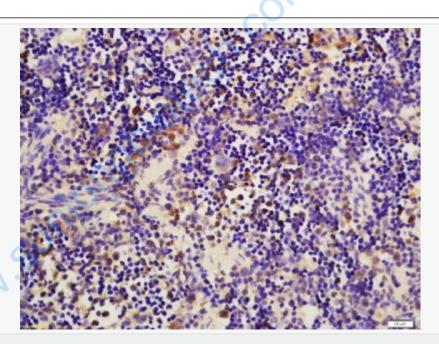
<u>Unigene: 702947</u>Human

<u>Unigene: 163</u>Mouse

Unigene: 1868Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Tissue/cell: mouse spleen tissue; 4% Paraformaldehyde-fixed and paraffinembedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-beta 2 Microglobulin Polyclonal Antibody,

Unconjugated(SL6294R) 1:200, overnight at 4°C, followed by conjugation to the
secondary antibody(SP-0023) and DAB(C-0010) staining

