

Datasheet for ABIN1607703

anti-beta-2 Microglobulin antibody





Overview

Quantity:	100 μg
Target:	beta-2 Microglobulin (B2M)
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunofluorescence (IF), Fluorescence Microscopy (FM)

Product Details

Purpose:	Beta-2-Microglobulin Antibody
Immunogen:	Immunogen: Anti-Beta-2-Microglobulin Antibody was produced by repeated immunizations with human beta-2-Microglobulin protein isolated from urine. Immunogen Type: Native Protein
Isotype:	IgG
Cross-Reactivity (Details):	Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Peroxidase and anti-Rabbit Serum, as well as purified and partially purified b2-Microglobulin (Human Urine).
Characteristics:	Synonyms: rabbit anti-Beta-2-Microglobulin Antibody, b2-Microglobulin, B2M antibody, B2MG_HUMAN antibody, Beta 2 microglobin antibody, Beta 2 microglobulin precursor antibody, Beta chain of mhc class 1 proteins antibody, Hdcma22p antibody, CDABP0092 antibody, IMD43 antibody
Purification:	Anti-beta-2-Microglobulin antibody is an IgG fraction antibody purified from monospecific

antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above.

Target Details

Target:	beta-2 Microglobulin (B2M)
Alternative Name:	B2M (B2M Products)
Background:	Background: Anti-beta-2-Microglobulin Antibody detects beta-2-Microglobulin. Beta-2-microglobulin is a component of the class I major histocompatibility complex (MHC), which are present on all nucleated cells (excludes red blood cells). It is involved in the presentation of peptide antigens to the immune system. Beta-2-microglobulin associates not only with the alpha chain of MHC class I molecules, but also with class I-like molecules such as CD1 and Qa. Defects in B2M are the cause of hypercatabolic hypoproteinemia. Anti-beta-2-Microglobulin Antibody is ideal for investigators involved in Cell Signaling, Immunology and Cell Biology research.
Gene ID:	567
NCBI Accession:	NP_004039
UniProt:	P61769
Pathways:	TCR Signaling, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process

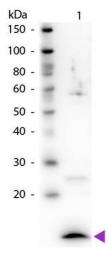
Application Details

Application Notes:	Immunohistochemistry Dilution: 1:500 - 1:2,000
	Application Note: Anti-beta-2-Microglobulin antibody has been tested in western blot,
	immunohistochemistry, and immunofluorescence. This product detects a single band of the
	expected apparent molecular weight (~13.7 kDa), and is suitable for use in ELISA. Researchers
	should determine optimal titers for applications that are not stated below.
	Western Blot Dilution: 1:200 - 1:500
	ELISA Dilution: 1:2,000 - 1:10,000
	IF Microscopy Dilution: 1:200
	Other: User Optimized
Restrictions:	For Research Use only

Handling

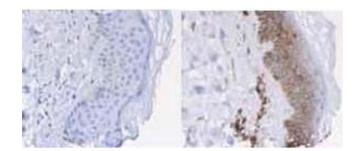
Format:	Lyophilized
Reconstitution:	Reconstitution Volume: 100 µL Reconstitution Buffer: Restore with deionized water (or equivalent)
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Western Blot of Rabbit Anti-Beta-2-Microglobulin antibody. Lane 1: Beta-2-Microglobulin. Lane 2: None. Load: 50 ng per lane. Primary antibody: Beta-2-Microglobulin primary antibody at 1:1,000 overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:40,000 for 30 min at RT. Blocking: ABIN925618 for 30 min at RT. Predicted/Observed size: 12 kDa, 12 kDa for Beta-2-Microglobulin. Other band(s): Beta-2-Microglobulin splice variants and isoforms.



Immunohistochemistry

Image 2. Immunohistochemistry of Rabbit anti-Beta-2-Microglobulin Antibody. Tissue: normal human skin. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Left panel: isotype control, Right panel: \(\mathbb{G} \)2 microglobulin antibody at 1 ug/ml for 20 min at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: \(\mathbb{G} \)2 microglobulin is cell membrane (and to lesser amount cytoplasmatic compartment). Staining: Beta-2-Microglobulin as brown with diaminobenzidine and with a hematoxylin purple counterstain.

Immunofluorescence

Image 3.

