

Datasheet for 200-406-141-0100**Beta-2-Microglobulin Antibody Biotin Conjugated****Overview**

Description:	Anti-Beta-2-Microglobulin (Human Urine) (RABBIT) Antibody Biotin Conjugated - 200-406-141-0100
Item No.:	200-406-141-0100
Size:	100 µg
Applications:	Dot Blot, ELISA
Reactivity:	Human
Host Species:	Rabbit

Product Details

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.
Synonyms:	rabbit anti-Beta-2-Microglobulin Antibody biotin Conjugation, biotin conjugated Beta-2-Microglobulin Antibody, B2M antibody, Beta 2 microglobulin precursor antibody, Beta chain of mhc class 1 proteins antibody, Hdcma22p antibody
Host Species:	Rabbit
Conjugate:	Biotin
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	B2M
Reactivity:	Human
Immunogen Type:	Native Protein

Immunogen:	Anti-Beta-2-Microglobulin Antibody was produced by repeated immunizations with beta-2-Microglobulin protein isolated from human urine.
Purity/Specificity:	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. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Biotin, anti-Rabbit Serum as well as purified and partially purified b2-Microglobulin [Human Urine]. Cross reactivity against b2-Microglobulin from other sources may occur but has not been specifically determined.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P61769• NCBI - NP_004039.1• GenelD - 567

Application Details

Tested Applications:	Dot Blot
Suggested Applications:	ELISA (Based on references)
Application Note:	Anti-beta-2-Microglobulin Biotin antibody has been tested by dot blot and is suitable for western blotting to detect a single band of the expected apparent molecular weight and for ELISA. Researchers should determine optimal titers for applications that are not stated below.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:10,000
IHC:	1:500 - 1:3,000
WB:	1:1,000 - 1:5,000

Formulation

Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	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.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Dot Blot

Dot Blot results of Rabbit Anti-Beta 2 Microglobulin Biotin Conjugated. Antigen: Beta-2-Microglobulin. Blot loaded at 3 fold dilution: 1. 100ng, 2. 33.3ng, 3. 11.1ng, 4. 3.70ng, 5. 1.23ng. Blocking: MB-070 Buffer for 30 minutes at RT. Primary Antibody: Rabbit Anti-Beta-2-Microglobulin Biotin 10µg/mL for 1hr at RT. Secondary Antibody: Streptavidin-HRP (p/n S000-03) at 1:40,000 for 30min at RT. Imaging System ChemiDoc, Filter used: Chemi.

References

- Keefe JA et al. Evidence for a Causal Role of the SH2B3-β 2 M Axis in Blood Pressure Regulation. *Hypertension*. (2019)

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