

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse β_2 -Microglobulin in direct ELISAs and Western blots.
Source	Monoclonal Rat IgG _{2A} Clone # 893803
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse β_2 -Microglobulin Met1-Met119 Accession # P01887
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Beta 2-Microglobulin (b2M) is a 12 kDa secreted polypeptide that serves as the light chain of Class I MHC molecules. Possessing an Ig-like domain, b2M noncovalently associates with both 44 kDa classical (HLA-A, -B, -C) and 40 kDa non-classical (HLA-E, -F, -G) Class I MHC heavy chains as well as with 43-49 kDa Class I non-MHC heavy chains (CD1). b2M is expressed on nearly all nucleated cells, with neurons being a notable exception. Circulating b2M is generated during normal HLA turnover. It can also dissociate from the MHC complex and circulate as full length and N-terminal truncated peptides of 93, 91, and 90 amino acids. It has been measured in a variety of body fluids, including serum, plasma, saliva, CSF, and urine. b2M freely passes through the glomerular membrane, but it is 99% actively reabsorbed and degraded in the proximal tubule cells. Circulating b2M levels are elevated in rheumatoid arthritis, systemic lupus erythematosus, viral infections, and conditions with decreased glomerular filtration. Human b2M shares 70% and 75% amino acid sequence identity with mouse and rat b2M, respectively.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.