

**Revision: 1** 

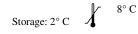
Rev. Date: March 25, 2015

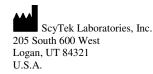
Page 1 of 2

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# Beta-2 Microglobulin (Renal Failure & Tumor Marker); Clone B2M/961 (Concentrate)

Availability/Contents:	Item # Volume BA0425-C.5 0.5 ml
Description:	
Species: Immunogen: Clone:	Mouse Full length recombinant human B2M protein B2M/961
Isotype: Entrez Gene ID: Hu Chromosome Loc.: Synonyms:	IgG2b, kappa 567 (Human) 15q21-q22.2 B2M; Beta 2 microglobin; Beta 2 microglobulin; Beta chain of MHC class I molecules; Beta-2- microglobulin form pI 5.3; Hdcma22p.
Mol. Weight of Antigen: Format:	12kDa $200\mu$ g/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity: Background:	This antibody recognizes a protein of 12kDa, identified as Beta-2 Microglobulin. Major histocompatibility complex (MHC) class 1 molecules bind to antigens for presentation on the surface of cells. The proteasome is responsible for producing these antigens from the components of foreign pathogens. MHC class 1 molecules consist of an alpha chain (heavy chain) that contains three subdomains (alpha1, alpha2, alpha3) and a non-covalent associating light chain, known as the beta-2-Microglobulin chain. Beta-2-Microglobulin associates with the alpha3 subdomain of the alpha chain and forms an immunoglobulin domain-like structure that mediates proper folding and expression of MHC class 1 molecules. The alpha1 and alpha2 domains of the alpha chain form the peptide antigen-binding cleft. Mutations in the beta-2 Microglobulin gene can enhance the progression of malignant melanoma phenotypes.
Species Reactivity: Positive Control:	Human and non-human primates. Others not known. HL-60 or HeLa cells. Melanomas and Lymphoma. Carcinoma of Stomach, Cervix, Endometrial, Kidney or Colon.
Cellular Localization: Titer/ Working Dilution:	Cell Surface and Extracellular (Secreted)Immunohistochemistry (Frozen and Formalin-fixed):0.5-1 μg/mlFlow Cytometry:0.5-1 μg/million cellsImmunofluorescence:0.5-1 μg/mlWestern Blotting:0.5-1 μg/mlImmunoprecipitation:0.5-1 μg/500μg protein lysate
Microbiological State:	This product is not sterile.







EC REP EmergoEurope (31)(0) 70 345-8570 Molsnstraat 15 2513 BH Hague, The Netherlands



## Instructions For Use RA0425-C.5-IFU-RUO

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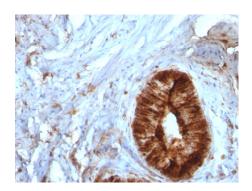
Page 2 of 2

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**Uses/Limitations:** 

Not to be taken internally. For Research Use Only. This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy. Do not use if reagent becomes cloudy. Do not use past expiration date. Non-Sterile.

### Ordering Information and Current Pricing at www.scytek.com



Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2 Microglobulin; Clone B2M/961.

#### Procedure:

- 1. **Tissue Section Pretreatment (Required):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
- Primary Antibody Incubation Time: We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- 3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

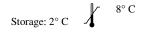
 Precautions:
 Contains Sodium Azide as a preservative (0.09% w/v).

 Do not pipette by mouth.
 Avoid contact of reagents and specimens with skin and mucous membranes.

 Avoid microbial contamination of reagents or increased nonspecific staining may occur.
 This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

#### **References:**

- 1. Josson, S., et al. 2011. β2-Microglobulin induces epithelial to mesenchymal transition and confers cancer lethality and bone metastasis in human cancer cells. Cancer Res. 71: 2600-2610.
- Warranty: No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.







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