

# Beta-2 Microglobulin Monoclonal Mouse Antibody (246-E9.E7, same as HLA.ABC.m2)

## Product Description

Beta-2 microglobulin is a component of the class I major histocompatibility complex (MHC I) where it functions in antigen processing and presentation. Involved in the presentation of peptide antigens to the immune system. Human Beta-2 microglobulin is expressed on many types of cells including lymphocytes, thymocytes, monocytes, granulocytes, platelets, endothelial cells, and epithelial cells. It is absent on erythrocytes. This MAb is specific to human Beta-2 microglobulin and does not react with non-human primate cells. This antibody reacts with all cell types excluding erythrocytes. The detection of Beta-2 microglobulin in body fluids has been used as a tumor marker and for monitoring patients with HIV infection. Clone 246 E9.E7 is the same as HLA.ABC.m2. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order. **Catalog number key for antibody number 1039, Anti-Beta-2 Microglobulin (246-E9.E7|same as HLA.ABC.m2)**

## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. J Histochem Cytochem (1985) 33(12): 1183-1189. (IF)
2. Immunol Cell Biol (1988) 66 (Pt 1) 69-77. (platelet aggregation)
3. Br J Cancer (1992) 66: 88-92. (IP)

### Product attributes

Antibody number	#1039
Antibody reactivity (target)	Beta-2 Microglobulin
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	246-E9.E7, same as HLA.ABC.m2
Isotype	IgG2a, kappa
Molecular weight	12 kDa
Synonyms	B2M; Beta 2 microglobulin
Human gene symbol	B2M
Entrez gene ID	567
SwissProt	P61769
Unigene	534255
Immunogen	Human PBLs from a T-cell acute lymphoblastic leukemia (T-ALL) patient
Antibody target cellular localization	Endoplasmic reticulum, Plasma membrane, Secreted (extracellular)
Species reactivity	Human
Expected antibody applications	Flow, surface (published for clone), Functional studies (published for clone), IF (published for clone), IP (published for clone)
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Does not react with non-human primates; others not known, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	HL-60 or HeLa cells. Melanomas and Lymphoma, Carcinoma of Stomach, Cervix, Endometrial, Kidney or Colon.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer, Immunology, Inflammation

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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