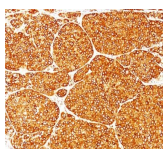


Tyrosinase Monoclonal Mouse Antibody (T311)



Product Description

Recognizes a cluster of proteins between 70-80 kDa, identified as tyrosinase. Occasionally a minor band at 55 kDa is also detected. This MAb shows no cross-reaction with MAGE-1 and tyrosinase-related protein 1, TRP-1/gp75. Tyrosinase is a copper-containing metalloglycoprotein that catalyzes several steps in the melanin pigment biosynthetic pathway; the hydroxylation of tyrosine to L-3,4-dihydroxy-phenylalanine (dopa), and the subsequent oxidation of dopa to dopaquinone. Mutations of the tyrosinase gene occur in various forms of albinism. Tyrosinase is one of the targets for cytotoxic T-cell recognition in melanoma patients. Staining of melanomas with this MAb shows tyrosinase in melanotic as well as amelanotic variants. This MAb is a useful marker for melanocytes and melanomas.

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 to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0012, Anti-Tyrosinase (T311)

Product attributes

Antibody number	#0012
Antibody reactivity (target)	Tyrosinase
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	T311
Isotype	IgG2a, kappa
Molecular weight	70-80 kDa
Synonyms	ATN, CMM8, LB24-AB, Monophenol monooxygenase, OCA1, OCA1A, Oculocutaneous albinism IA, SHEP3, SK29-AB, Tumor rejection antigen AB, TYR
Human gene symbol	TYR
Entrez gene ID	7299
SwissProt	P14679
Unigene	503555
Immunogen	Recombinant tyrosinase protein
Antibody target cellular localization	Cytoplasmic
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Human
Expected antibody applications	ELISA (published for clone), Flow (intracellular) (published for clone), IP (published for clone), WB (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: 1-2 ug/mL, Immunohistology formalin-fixed 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, or 10 mM citrate buffer, pH6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	SK-MEL-19, SK-MEL-30 cells or Melanoma.
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
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Cell/tissue expression	Melanocytes
Tumor expression	Melanoma

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF@405S	404/431	405	DAPI (microscopy), AF405	CF@405S Features
BNC88	CF@488A	490/515	488	GFP, FITC	CF@488A Features
BNC68	CF@568	562/583	532, 561	RFP, TRITC	CF@568 Features
BNC94	CF@594	593/614	561	Texas Red®	CF@594 Features
BNC40	CF@640R	642/662	633-640	Cy@5	CF@640R Features
BNC47	CF@647	650/665	633-640	Cy@5	CF@647 Features
BNC74	CF@740	742/767	633-685	775/50	CF@740 Features
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	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

References

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

- J Clin Pathol (2001) 54:196-200. (IHC, FFPE)
- PNAS USA (1995) 92: 8125-8129. (WB, IHC, ELISA)
- J Biol Chem (2001) 276(15): 11933-11938. (WB, IP)
- Cytometry Part A (2012) 81A: 374381. (Flow, Intracellular)

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Product link: <https://biotium.com/product/monoclonal-anti-tyrosinase-t311/>