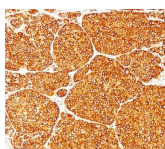


# Tyrosinase Monoclonal Mouse Antibody (T311)



## 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](mailto: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

<b>Antibody number</b>	#0012
<b>Antibody reactivity (target)</b>	Tyrosinase
<b>Antibody type</b>	Primary
<b>Host species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	T311
<b>Isotype</b>	IgG2a, kappa
<b>Molecular weight</b>	70-80 kDa
<b>Synonyms</b>	ATN, CMM8, LB24-AB, Monophenol monooxygenase, OCA1, OCA1A, Oculocutaneous albinism IA, SHEP3, SK29-AB, Tumor rejection antigen AB, TYR
<b>Human gene symbol</b>	TYR
<b>Entrez gene ID</b>	7299
<b>SwissProt</b>	P14679
<b>Unigene</b>	503555
<b>Immunogen</b>	Recombinant tyrosinase protein
<b>Antibody target cellular localization</b>	Cytoplasmic
<b>Verified antibody applications</b>	IHC (FFPE) (verified)
<b>Species reactivity</b>	Human
<b>Expected antibody applications</b>	ELISA (published for clone), Flow (intracellular) (published for clone), IP (published for clone), WB (published for clone)
<b>Antibody application notes</b>	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
<b>Positive control</b>	SK-MEL-19, SK-MEL-30 cells or Melanoma.
<b>Shipping condition</b>	Room temperature
<b>Storage Conditions</b>	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
<b>Shelf life</b>	Guaranteed for at least 24 months from date of receipt when stored as recommended
<b>Regulatory status</b>	For research use only (RUO)
<b>Antibody/conjugate formulation</b>	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
<b>Antibody research areas</b>	Cancer
<b>Product origin</b>	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.
<b>Cell/tissue expression</b>	Melanocytes
<b>Tumor expression</b>	Melanoma

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>
BNC74	CF@740	742/767	633-685	775/50	<a href="#">CF@740 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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## 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/>