

# MAML2 Monoclonal Mouse Antibody (MAML2/1302)

## Product Description

MAML2 (mastermind-like protein 2), also known as MAM2, MAM3 or MLLMAML2, is a nuclear speckle protein that acts as a transcriptional co-activator for Notch receptors. The Notch signaling pathway influences cell fate by regulating the ability of precursor cells to properly respond to developmental signals. MAML2 is a member of the mastermind-like family of proteins that are human homologs of the *Drosophila melanogaster* mastermind protein. Through its N-terminal region, MAML2 interacts with the ankyrin repeats of the Notch proteins Notch 1, Notch 2, Notch 3 and Notch 4. This interaction leads to formation of a DNA-binding complex with the Notch proteins and RBP-J, a complex that can then induce HES1 gene expression. While the N-terminal domain of MAML2 is essential for proper Notch binding, the C-terminal domain of MAML2 is essential for transcriptional activation. A chromosomal aberration involving the gene encoding MAML2 is implicated in mucoepidermoid carcinomas, clear cell hidradenomas and benign Warthin tumors. 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 1302, Anti-MAML2 (MAML2/1302)**

## Product attributes

Antibody number	#1302
Antibody reactivity (target)	MAML2
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	MAML2/1302
Isotype	IgG2a
Molecular weight	125 kDa
Synonyms	Mam-2; MAML2; Mastermind-like protein 2
Human gene symbol	MAML2
Entrez gene ID	84441 (Human)
SwissProt	Q8IZL2 (Human)
Unigene	428214 (Human)
Immunogen	Recombinant human full-length MAML2
Verified antibody applications	IHC (FFPE) (verified)
Antibody target cellular localization	Cytoplasmic, Nucleus
Species reactivity	Human
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. Immunohistology (formalin): 0.5-1 ug/mL. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM Tris, 1 mM EDTA pH 9.0 for 10-20 min followed by cooling at RT for 20 min. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Western blotting 0.5-1 ug/mL. Optimal dilution for a specific application should be determined by user
Positive control	MCF-7 cells. Pancreas or Placenta. Bladder or Colon Carcinoma.
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	Developmental biology, Signal transduction

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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