

# Anti-MAML2 Antibody

Mouse Monoclonal Antibody Catalog # AH13592

### **Product Information**

| Application       | WB, IHC-P, IF, FC |
|-------------------|-------------------|
| Primary Accession | <u>Q8IZL2</u>     |
| Other Accession   | <u>428214</u>     |
| Reactivity        | Human             |
| Host              | Mouse             |
| Clonality         | Monoclonal        |
| Isotype           | Mouse / IgG2a     |
| Clone Names       | MAML2/1302        |
| Calculated MW     | 125197            |

### **Additional Information**

| Gene ID          | 84441   |
|------------------|---|
| Other Names      | Mam-2; MAML2; Mastermind-like protein 2   |
| Application Note | Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (0.5-1ug/ml);<br>,Western Blotting (0.5-1ug/ml); ,Immunohistology (Formalin-fixed)<br>(0.5-1.0ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues is<br>enhanced by boiling tissue sections in 10mM Tris with 1mM EDTA, pH 9.0 for<br>10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a<br>specific application should be determined. |
| Format           | 200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G.<br>Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available<br>WITHOUT BSA & azide at 1.0mg/ml.  |
| Storage          | Store at 2 to 8°C.Antibody is stable for 24 months.   |
| Precautions      | Anti-MAML2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.   |

## **Protein Information**

| Name     | MAML2  |
|----------|--|
| Synonyms | KIAA1819   |
| Function | Acts as a transcriptional coactivator for NOTCH proteins. Has been shown to amplify NOTCH-induced transcription of HES1. Potentiates activation by NOTCH3 and NOTCH4 more efficiently than MAML1 or MAML3. |

**Tissue Location** 

Nucleus speckle. Note=Nuclear, in a punctate manner

Widely expressed with high levels detected in placenta, salivary gland and skeletal muscle

### Background

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-Jk; 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.

#### Images



Formalin-fixed, paraffin-embedded Human Pancreas stained with MAML2 Monoclonal Antibody (MAML2/1302).

Formalin-fixed, paraffin-embedded Human Colon Carcinoma stained with MAML2 Monoclonal Antibody (MAML2/1302).

Formalin-fixed, paraffin-embedded Human Bladder Carcinoma stained with MAML2 Monoclonal Antibody (MAML2/1302).

Formalin-fixed, paraffin-embedded Human Placenta stained with MAML2 Monoclonal Antibody (MAML2/1302).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.