



Rabbit Anti-MAML1 antibody

SL12396R

Product Name:	MAML1
Chinese Name:	主导控制样蛋白1抗体
Alias:	Mam-1; Mam1; MAML 1; MAML 1; Mam1; MAML1_HUMAN; Mastermind like 1; Mastermind-like protein 1; mKIAA0200.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	108kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MAML1:401-500/1016
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Notch receptors are involved in cell-fate determination in organisms as diverse as flies, frogs, and humans (1). The 'mastermind' gene has been identified in multiple genetic screens for modifiers of Notch mutations in <i>Drosophila melanogaster</i> (2). In <i>Drosophila</i> , loss-of-function mutations of Notch produce a 'neurogenic' phenotype in which cells destined to become epidermis switch fate and differentiate to neural cells (2). The human homolog, mastermind-like 1 (Mam1), localizes to nuclear bodies (2-4).

Mam1 binds to the ankyrin repeat domain of all four mammalian Notch receptors, forms a DNA-binding complex with ICN and RBP-Jk, and amplifies Notch-induced transcription of Hes1 (2). Mam1 is an essential component of the transcriptional apparatus of Notch signaling (5). The gene which encodes Mam1 maps to human chromosome 5 (4).

Function:

Acts as a transcriptional coactivator for NOTCH proteins. Has been shown to amplify NOTCH-induced transcription of HES1. Enhances phosphorylation and proteolytic turnover of the NOTCH intracellular domain in the nucleus through interaction with CDK8. Binds to CREBBP/CBP which promotes nucleosome acetylation at NOTCH enhancers and activates transcription. Induces phosphorylation and localization of CREBBP to nuclear foci. Plays a role in hematopoietic development by regulating NOTCH-mediated lymphoid cell fate decisions.

Subunit:

Interacts (via N-terminus) with NOTCH1, NOTCH2, NOTCH3 and NOTCH4 (via ankyrin repeat region). Interacts (via N-terminus) with p53 (via DNA-binding region). Forms a DNA-binding complex with Notch proteins and RBPSUH/RBP-J kappa/CBF1. Also binds CREBBP/CBP and CDK8.

Subcellular Location:

Nucleus speckle. Nuclear, in a punctate manner.

Tissue Specificity:

Widely expressed with highest levels in heart, pancreas, peripheral blood leukocytes and spleen.

Similarity:

Belongs to the mastermind family.

SWISS:

Q92585

Gene ID:

9794

Database links:

[Entrez Gene: 9794](#)Human

[Entrez Gene: 103806](#)Mouse

[Entrez Gene: 303101](#)Rat

[Omim: 605424](#)Human

[SwissProt: Q92585](#)Human

[SwissProt: Q6T264](#)Mouse

[Unigene: 631951](#)Human

[Unigene: 51116](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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