

MAML1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54848

Specification

MAML1 Polyclonal Antibody - Product Information

WB, IHC-P, IHC-F, IF, ICC, E Application

Primary Accession 092585 Reactivity Rat, Dog Host **Rabbit** Clonality **Polyclonal** Calculated MW 108 KDa

Physical State Immunogen KLH conjugated synthetic peptide derived

Liquid

from human MAML1

401-500/1016 **Epitope Specificity**

Isotype laG **Purity**

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus speckle. Nuclear, in a punctate

manner.

Belongs to the mastermind family. **SIMILARITY 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.

Important Note This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

Background Descriptions

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 Drosophila melanogaster (2). In Drosophila, 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).

MAML1 Polyclonal Antibody - Additional Information

Gene ID 9794



Other Names

Mastermind-like protein 1, Mam-1, MAML1 (HGNC:13632)

Target/Specificity

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

Dilution

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 < span class = "dilution_WB">WB~~1:1000</span>< br \>< span class = "dilution_IHC-P">IHC-P~~N/A</span>< br \>< span class = "dilution_IHC-F">IHC-F~~N/A</span>< br \>< span class = "dilution_IF">IF~~1:50~200</span>< br \>< span class = "dilution_ICC">ICC~~N/A</span>< br \>< span class = "dilution_E">E~~N/A</span>< span
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Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

MAML1 Polyclonal Antibody - Protein Information

Name MAML1 (HGNC:13632)

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.

Cellular Location

Nucleus speckle. Note=Nuclear, in a punctate manner

Tissue Location

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

MAML1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MAML1 Polyclonal Antibody - Images