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Rabbit Anti-MATH1 antibody

SL3522R

Product Name:	MATH1
Chinese Name:	肠道分化Stem cellsMATH-1蛋白抗体
Alias:	ATH 1; ATH1; ATOH 1; ATOH1; Atonal homolog 1; Atonal protein homolog 1; HATH 1; HATH1; Helix loop helix protein hATH 1; MATH 1; MATH1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	38kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MATH1:145-250/354
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:	The Drosophila atonal gene produces a protein with basic helix loop helix (bHLH) domains that plays an essential role in the development of the Drosophila nervous system. Mammalian atonal homolog 1 (MATH-1) is a helix-loop-helix (HLH) transcription factor that is structurally homologous to the product of the Drosophila proneural gene atonal. MATH-1, so known as Atoh1, Ath1 or HATH-1, is a 351 amino acid protein with an atonal-related basic HLH domain. In mice, expression of MATH-1

takes place by embryonic day 9.5 and initially localizes to the cranial ganglions and the dorsal part of the central nervous system. Prominent expression of MATH-1 is in the dorsal part of the central nervous system but becomes restricted to the external granular layer of the cerebellum by day 18 and is undetectable in the adult nervous system. It is suggested that MATH-1 may play a role in the differentiation of subsets of neural cells by activating E box-dependent transcription.

Function:
MATH1 protein belongs to the basic helix-loop-helix (BHLH) family of transcription factors. It activates E-box dependent transcription along with E47. MATH1 is neural-specific and is switched on during differentiation into neuroectoderm.
Activates E box-dependent transcription in collaboration with TCF3/E47, but the activity is completely antagonized by the negative regulator of neurogenesis HES1. May play a role in the differentiation of subsets of neural cells by activating E box-dependent transcription.

Subcellular Location:
Nucleus.

Similarity:
Contains 1 basic helix-loop-helix (bHLH) domain.

SWISS:
Q92858

Gene ID:
474

Database links:

Entrez Gene: 474Human

Entrez Gene: 11921Mouse

Entrez Gene: 500156Rat

Omim: 601461Human

SwissProt: Q92858Human

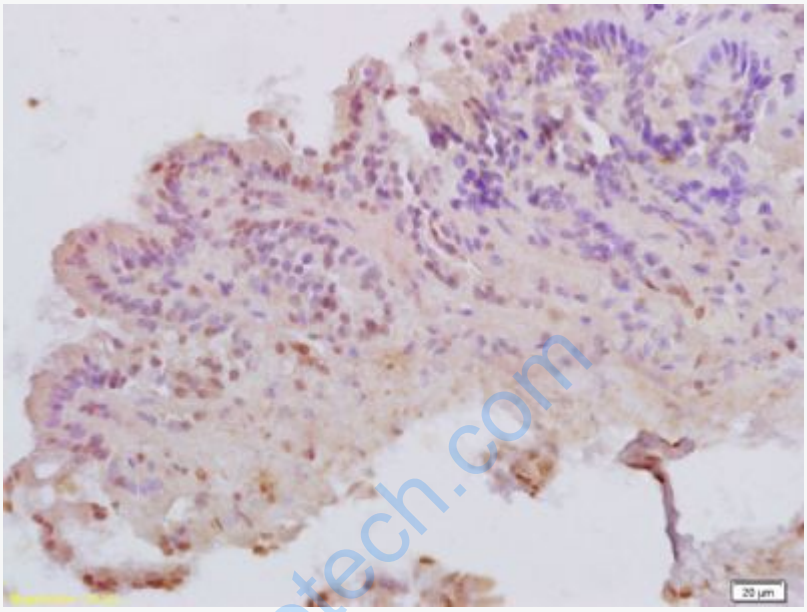
SwissProt: P48985Mouse

Unigene: 532680Human

Unigene: 57229Mouse

Unigene: 218507Rat

Important Note:

	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Tissue/cell: rat colitis tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-MATH1 Polyclonal Antibody, Unconjugated(SL3522R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining