10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Manic Fringe Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54846

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	O00587
Reactivity	Rat, Chimpanzee, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36202
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Manic Fringe/MFNG
Epitope Specificity	221-321/321
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Golgi apparatus membrane.
SIMILARITY	Belongs to the glycosyltransferase 31 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Three mammalian fringe family members, Manic, Radical and Lunatic Fringe, have been identified as proteins related to Drosophila fringe, a protein involved in development. Fringe proteins act upstream of the Notch signaling pathway and are involved in boundary determination during segmentation. Each mammalian fringe displays different patterns of expression, though all are expressed in the mouse embryo as well as in many adult tissues. Radical fringe plays a key role in the development of the limb bud. Lunatic fringe is required for normal somite segmentation and patterning and is thought to be a target of the molecular clock. Manic fringe, also involved in somatic development, has been shown to render mouse NIH/3T3 cells tumorigenic in SCID mice.

Additional Information

Gene ID	4242
Other Names	Beta-1, 3-N-acetylglucosaminyltransferase manic fringe, 2.4.1.222, O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase, MFNG
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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.

Protein Information

Name	MFNG (HGNC:7038)
Function	Glycosyltransferase that initiates the elongation of O-linked fucose residues attached to EGF-like repeats in the extracellular domain of Notch molecules (By similarity). Modulates NOTCH1 activity by modifying O-fucose residues at specific EGF-like domains resulting in inhibition of NOTCH1 activation by JAG1 and enhancement of NOTCH1 activation by DLL1 via an increase in its binding to DLL1 (By similarity).
Cellular Location	Golgi apparatus membrane; Single- pass type II membrane protein