

FNTA Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP2420a

Product Information

Application	WB, E
Primary Accession	P49354
Other Accession	Q04631 , Q61239 , P29702
Reactivity	Human, Mouse
Predicted	Bovine, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB4792
Calculated MW	44409
Antigen Region	88-118

Additional Information

Gene ID	2339
Other Names	Protein farnesyltransferase/geranylgeranyltransferase type-1 subunit alpha, CAAX farnesyltransferase subunit alpha, FTase-alpha, Ras proteins prenyltransferase subunit alpha, Type I protein geranyl-geranyltransferase subunit alpha, GGTase-I-alpha, FNTA
Target/Specificity	This FNTA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 88-118 amino acids from the Central region of human FNTA.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FNTA Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FNTA
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Function

Essential subunit of both the farnesyltransferase and the geranylgeranyltransferase complex. Contributes to the transfer of a farnesyl or geranylgeranyl moiety from farnesyl or geranylgeranyl diphosphate to a cysteine at the fourth position from the C-terminus of several proteins having the C-terminal sequence Cys-aliphatic- aliphatic-X. May positively regulate neuromuscular junction development downstream of MUSK via its function in RAC1 prenylation and activation.

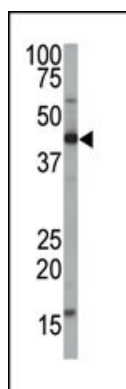
Background

FNTA, also known as CAAX farnesyltransferase (FTase), attaches a farnesyl group from farnesyl pyrophosphate to cysteine residues at the fourth position from the C terminus of proteins that end in the so-called CAAX box, where C is cysteine, A is usually but not always an aliphatic amino acid, and X is typically methionine or serine. This type of posttranslational modification provides a mechanism for membrane localization of proteins that lack a transmembrane domain. This enzyme has the remarkable property of farnesylating peptides as short as four residues in length that conform to the CAAX consensus sequence. FNTA is also a specific cytoplasmic interactor of the transforming growth factor-beta and activin type I receptors. It is likely to be a key component of the signaling pathway which involves p21ras, an important substrate for farnesyltransferase.

References

Wang, T., et al., Science 271(5252):1120-1122 (1996).
Zhang, F.L., et al., J. Biol. Chem. 269(5):3175-3180 (1994).
Andres, D.A., et al., Genomics 18(1):105-112 (1993).
Omer, C.A., et al., Biochemistry 32(19):5167-5176 (1993).

Images



The anti-FNTA Pab (Cat. #AP2420a) is used in Western blot to detect FNTA in mouse brain tissue lysate.

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