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FNTA Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2420b

Product Information

Application	WB, IHC-P, E
Primary Accession	P49354
Other Accession	Q04631, Q61239, P29702
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	44409
Antigen Region	330-360

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 330-360 amino acids from the C-terminal region of human FNTA.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FNTA
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.

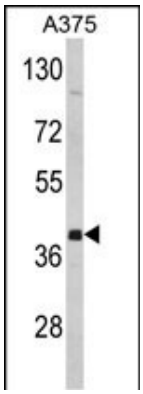
Background

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.

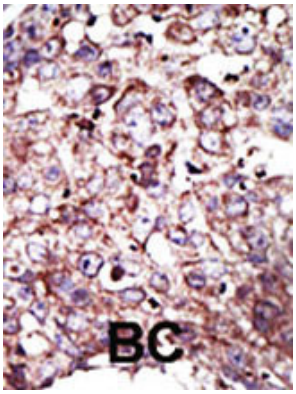
References

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



Western blot analysis of hFNTA-A345 (Cat. #AP2420b) in A375 cell line lysates (35ug/lane). FNTA (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Citations

- Upregulation of geranylgeranyltransferase I in bronchial smooth muscle of mouse experimental asthma: its inhibition by lovastatin.

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