

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 |
| 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.

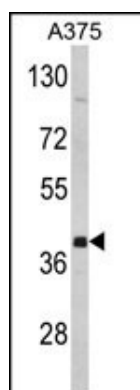
Background

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.

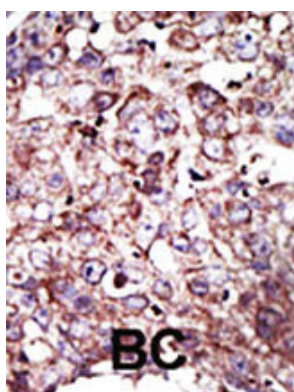
References

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'.