

### **FNTA Antibody (C-term)**

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2420b

# **Specification**

### FNTA Antibody (C-term) - Product Information

Application WB, IHC-P,E
Primary Accession P49354

Other Accession <u>Q04631</u>, <u>Q61239</u>, <u>P29702</u>

Reactivity Human

Predicted Bovine, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 330-360

## FNTA Antibody (C-term) - 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~~1:50~100

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.

### **FNTA Antibody (C-term) - Protein Information**



## **Name FNTA**

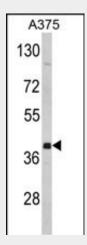
**Function** Essential subunit of both the farnesyltransferase and the geranylgeranyltransferase complex. Contributes to the transfer of a farnesyl or geranylgeranyl moiety from farnesyl or geranylgeranyl diphosphate to a cysteine at the fourth position from the C-terminus of several proteins having 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.

### **FNTA Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

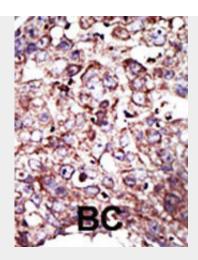
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## FNTA Antibody (C-term) - 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.

# FNTA Antibody (C-term) - 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.

## FNTA Antibody (C-term) - 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).

### **FNTA Antibody (C-term) - Citations**

• <u>Upregulation of geranylgeranyltransferase I in bronchial smooth muscle of mouse experimental asthma: its inhibition by lovastatin.</u>