

# Rabbit Anti-PGGT1A antibody

# SL9547R

| <b>Product Name:</b>   | PGGT1A  |
|------------------------|---|
| Chinese Name:          | 蛋白香叶烯基转移酶1α抗体   |
| Alias:                 | CAAX farnesyltransferase alpha subunit; Farnesyl protein transferase alpha subunit; Farnesyltransferase CAAX box alpha; Farnesyltransferase, CAAX box, alpha; FPTA; FTase alpha; GGTase I alpha; PGGT1A; Protein farnesyltransferase/geranylgeranyltransferase type I alpha subunit; Protein prenyltransferase alpha subunit repeat containing 2; PTAR2; Ras proteins prenyltransferase alpha; Ras proteins prenyltransferase subunit alpha; Type I protein geranyl geranyltransferase alpha subunit; FNTA_HUMAN. |
| Organism Species:      | Rabbit  |
| Clonality:             | Polyclonal  |
| <b>React Species:</b>  | Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Sheep,  |
| Applications:          | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.   |
| Molecular weight:      | 44kDa   |
| Cellular localization: | cytoplasmic   |
| Form:                  | Lyophilized or Liquid   |
| Concentration:         | 1mg/ml  |
| immunogen:             | KLH conjugated synthetic peptide derived from human PGGT1A/FNTA:301-379/379   |
| Lsotype:               | IgG   |
| Purification:          | affinity purified by Protein A  |
| Storage Buffer:        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.  |
| Storage:               | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.  |
| PubMed:                | <u>PubMed</u>   |
| Product Detail:        | 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.

## **Function:**

Catalyzes the transfer of a farnesyl or geranyl-geranyl moiety from farnesyl or geranyl-geranyl pyrophosphate to a cysteine at the fourth position from the C-terminus of several proteins having the C-terminal sequence Cys-aliphatic-aliphatic-X. The alpha subunit is thought to participate in a stable complex with the substrate. The beta subunit binds the peptide substrate. Through RAC1 prenylation and activation may positively regulate neuromuscular junction development downstream of MUSK (By similarity).

## **Subunit:**

Heterodimer of an alpha and a beta subunit. Interacts with MUSK; the interaction is direct and mediates AGRIN-induced phosphorylation of FNTA (By similarity).

## Subcellular Location:

Cytoplasmic

## Post-translational modifications:

Phosphorylated. Phosphorylation is mediated by MUSK upon AGRIN stimulation and results in the activation of FNTA (By similarity).

## Similarity:

Belongs to the protein prenyltransferase subunit alpha family. Contains 5 PFTA repeats.

#### **SWISS:**

P49354

## Gene ID:

2339

#### Database links:

Entrez Gene: 2339Human

Entrez Gene: 14272Mouse

Entrez Gene: 25318Rat

Omim: 134635Human SwissProt: P49354Human SwissProt: Q61239Mouse SwissProt: Q04631Rat <u>Unigene: 370312</u>Human Unigene: 3496Mouse Unigene: 5990Rat Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. PGGT1A Picture: Sample: Testis (Mouse) Lysate at 40 ug Primary: Anti-PGGT1A (SL9547R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 44 kD

| Observed band size: 44 kD |
|---------------------------|
|                           |

www.surionabiotechr.com