

FTase

Protein farnesyltransferase, α - and β -subunit rat, recombinant, *E. coli*

| Cat. No. | Amount |
|----------|------------|
| PR-102 | 50 μ g |

For *in vitro* use only

Quality guaranteed for 12 months

Store at -80°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 25 mM HEPES pH 7.2, 40 mM NaCl and 5 mM DTT.

Activity

1 pmol of FTase will transfer 1 pmol of farnesyl to H-Ras in 15 min at 37°C.

Molecular Weight

α -subunit: 44 kDa and β -subunit: 35 kDa

Purity

\geq 90% by SDS-PAGE

Description

FTase catalyzes the transfer of the farnesyl group from farnesyl diphosphate to proteins containing a C-terminal CaaX motif, where 'C' is a conserved cysteine that is the site of farnesyl modification, 'a' is usually an aliphatic amino acid, and 'X' is methionine, serine, glutamine, or alanine.

Selected References:

- Lackner *et al.* (2005) Chemical genetics identifies Rab geranylgeranyl transferase as an apoptotic target of farnesyl transferase inhibitors. *Cancer Cell*. **7**:325.
- Zimmerman *et al.* (1998) High-level expression of rat farnesyl:proteintransferase in *Escherichia coli* as a translationally coupled heterodimer. *Protein Express. Purif.* **14**:395.
- Hooff *et al.* (2008) Isoprenoid quantitation in human brain tissue: a validated HPLC-fluorescence detection method for endogenous farnesyl-(FPP) and geranylgeranylpyrophosphate (GGPP). *Analytical and Bioanalytical Chemistry*. **392**(4):673-680.
- Watanabe *et al.* (2008) Inhibitors of Protein Geranylgeranyltransferase I and Rab Geranylgeranyltransferase Identified from a Library of Allenoate-derived Compounds. *J. Biol. Chem.* **283**(15):9571-9579.
- Eckert *et al.* (2009) Regulation of the brain isoprenoids farnesyl- and geranylgeranylpyrophosphate is altered in male Alzheimer patients. *Neurobiology of Disease* **35**(2):251-257.

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