

**FTase**

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

Cat. No.	Amount
PR-102	50 μ g

For in vitro use only!

Shipping: shipped on dry ice

Storage Conditions: store at -80 °C

Additional Storage Conditions: avoid freeze/thaw cycles

Shelf Life: 12 months

Molecular Weight: α : 44 kDa, β : 49 kDa

Accession number: Q04631 / Q02293

Purity: > 90 % (SDS-PAGE)

Form: liquid (Supplied in 25 mM HEPES pH 7.2, 40 mM NaCl, 1 mM TCEP and 10 μ M ZnSO₄)

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.

Activity:

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

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 Alkenoate-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.