

**GGTase-I^{GST}**

Protein geranylgeranyltransferase type I
rat, recombinant, *E. coli*

Cat. No.	Amount
PR-360	50 µg

For general laboratory use.

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: 38 kDa

Accession number: NM_031082

Purity: > 90 % (SDS-PAGE)

Form: liquid (Supplied in 25 mM HEPES pH 7.2, 25 mM NaCl and 5 mM DTT)

Description:

GGTase-I (Geranylgeranyltransferase-I) catalyzes the transfer of the farnesyl and geranylgeranyl groups from farnesyl and geranylgeranyl-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 leucine or phenylalanine. Farnesyltransferase (FT) and GGTase-I are closely related, sharing a common α subunit and 30% identity in their β subunits. The GST-Tag facilitates the protein's application in typical GST pull-down assays.

Activity:

1 pmol of GGTase-I will transfer 5 pmol of Farnesyl to RhoA 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.

Yokoyama *et al.* (1993) Purification of a mammalian protein geranylgeranyltransferase. Formation and catalytic properties of an enzyme-geranylgeranyl pyrophosphate complex. *J. Biol. Chem.* **268**:4055.