

Recombinant Rat Rabggtgta Protein

Cat. No. Rabggtgta-723R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Rabggtgta protein α - and β -subunit was expressed in E. coli.
Species	Rat
Source	E.coli
Description	GGTase-II (Geranylgeranyltransferase-II) catalyzes the transfer of geranylgeranyl moiety onto two C-terminal cysteines of Rab proteins. Composed of an α and β heterodimer (50 and 38 kDa, respectively) and requires Rab escort protein for its catalytic activity. GGTase-II was shown to exhibit higher affinity towards geranylgeranyl pyrophosphate ($K_d = 8$ nM) than farnesyl pyrophosphate ($K_d = 60$ nM). Like FTase and GGTase-I, RabGGT functions as a heterodimer. The α subunit has 27% identity to that of CaaX prenylases but contains additional domains, while the β subunit shows 29% identity to that of FTase. The protein substrates of RabGGT have heterogeneous C termini that usually contain two cysteine residues (CXC), both of which are modified by geranylgeranyl groups. Unlike the CaaX prenylases, RabGGT requires specific accessory proteins known as REPs to guide the interaction with its targets. Some farnesyltransferase inhibitors (FTIs) were identified to inhibit RabGGT activity and induce p53 independent apoptosis in C. elegans.
Form	20 mM HEPES pH 7.2, 40 mM NaCl and 1 mM TCEP
Molecular Mass	α : 50 kDa, β : 38 kDa

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Purity	> 95 % (SDS-PAGE)
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Storage	Store at -80 centigrade, avoid freeze/thaw cycles.
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GENE INFORMATION

Gene Name	Rabggta Rab geranylgeranyltransferase, alpha subunit [Rattus norvegicus]
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Official Symbol	Rabggta
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Synonyms	Rabggta
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Gene ID	58983
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mRNA Refseq	NM_031654.2
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Protein Refseq	NP_113842.1
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UniProt ID	Q08602
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