Recombinant Full Length Human Ras-related C3 Botulinum Toxin Substrate 1 / RAC1 Protein, Untagged

Cat. No. RAC1-189H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Ras-Related C3 Botulinum Toxin substrate 1 produced in*E.Coli*is a single, non-glycosylated polypeptide chain. The protein contains 192 amino acids and has a molecular mass of 21.4 kDa.
Species	Human
Source	E.coli
ProteinLength	1-192 a.a.
Description	RAC1 is a GTPase which belongs to the RAS superfamily of small GTP-binding proteins. Members of this superfamily appear to regulate a diverse array of cellular events, including the control of cell growth, cytoskeletal reorganization, and the activation of protein kinases. RAC-1 regulates the actin cytoskeleton but also other cellular processes. RAC1 have been shown to be involved in the regulation of cell-cell adhesion.
Amino Acid Sequence	MQAIKCVVVGDGAVGKTCLLISYTTNAFPGEYIPTVFDNYSANVMVDGKPVNLGLWD TAQEDYDRLRPLSYPQTDVFLICFSLVSPASFENVRAKWYPEVRHHCPNTPIILVGTK LDLRDDKDTIEKLKEKKLTPITYPQGLAMAKEIGAVKYLECSALTQRGLKTVFDEAIRA VLCP PPVKKRKRKCLLL.
Physical Appearance	Sterile Filtered colorless solution.

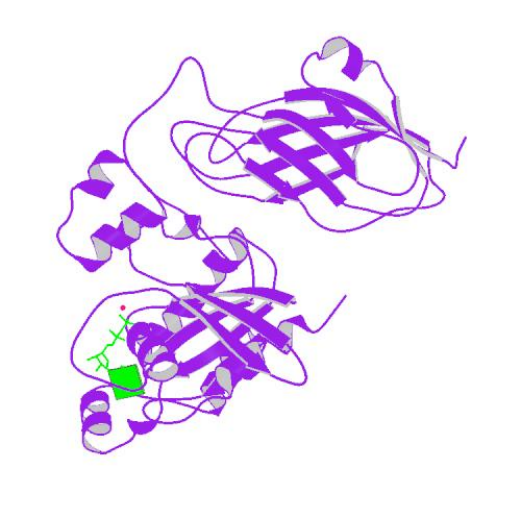
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Formulation	The protein solution (1mg/ml) cotains 20mM Tris-HCl pH7.5, 2mM EDTA and 1mM DTT.
Purity	Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Stability	RAC1 although stable 14℃for 4 weeks, should be stored desiccated below -18℃. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

GENE INFORMATION

Gene Name	RAC1 ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1) [Homo sapiens]
Synonyms	RAC1; MGC111543; MIG5; TC-25; PAK1; TC25; P21-RAC1; RAC-1; p21-Rac1;Ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1); RAS-like protein; Ras-related C3 botulinum toxin substrate 1; rho family; small GTP binding protein Rac1; Ras-related C3 botulinum toxin substrate 1; Cell migration-inducing gene 5 protein; Ras-like protein TC25; migration-inducing gene 5; migration-inducing protein 5; ras-related C3 botulinum toxin substrate 1; ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1); ras-related C3 botulinum toxin substrate 1 isoform Rac1; ras-related C3 botulinum toxin substrate 1 isoform Rac1b; rho family, small GTP binding protein Rac1
Gene ID	5879
mRNA Refseq	NM_006908
Protein Refseq	NP_008839

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MIM	602048
UniProt ID	P63000
Chromosome Location	7p22
Pathway	Adherens junction; Amyotrophic lateral sclerosis (ALS); Axon guidance; B cell receptor signaling pathway; Chemokine signaling pathway; Colorectal cancer; Epithelial cell signaling in Helicobacter pylori infection; Fc epsilon RI signaling pathway; Fc gamma R-mediated phagocytosis; Focal adhesion; Leukocyte transendothelial migration; MAPK signaling pathway; Natural killer cell mediated cytotoxicity; Neurotrophin signaling pathway; Pancreatic cancer; Regulation of actin cytoskeleton; Renal cell carcinoma; Toll-like receptor signaling pathway; VEGF signaling pathway; Wnt signaling pathway
Function	GTP binding; GTP-dependent protein binding; GTPase activity; enzyme binding; nucleotide binding
PDB rendering based on 1ds6.	

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