

Active Recombinant Full Length Human RAC2 Protein, His tagged

Cat. No. RAC2-100HFL Lot. No. (See product label)

SPECIFICATION

Product Overview	The human Rac2 protein has been produced in a bacterial expression system.
Species	Human
Source	Bacteria
ProteinLength	1-192 aa
Description	This gene encodes a member of the Ras superfamily of small guanosine triphosphate (GTP)-metabolizing proteins. The encoded protein localizes to the plasma membrane, where it regulates diverse processes, such as secretion, phagocytosis, and cell polarization. Activity of this protein is also involved in the generation of reactive oxygen species. Mutations in this gene are associated with neutrophil immunodeficiency syndrome. There is a pseudogene for this gene on chromosome 6.
Form	lyophilized powder
Molecular Weight	22 kDa
Bio-Activity	The biological activity is determined by its ability to exchange nucleotide. This is tested by a pulldown assay using GST tagged PAK-PBD beads and GTPyS or GDP loaded His-Rac2. The PAK protein is an effector of Rac2, and will specifically bind to the GTP bound form Rac2. Using this assay, the amount of biologically active GTP-bound Rac2 is determined. Stringent quality control ensures that >80% of the His-

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Rac2 protein produced is capable of binding GTP.

Purity > 90%

Applications Rac biochemistry Rac2 GTPase assays Rac2 nucleotide exchange assays Rac2 binding studies

Storage Buffer 2 mM Tris pH 7.6, 0.5 mM MgCl₂, 0.5% sucrose, 0.1% dextran

Reconstitution In distilled water to 1 mg/mL.

GENE INFORMATION

Gene Name RAC2 Rac family small GTPase 2 [Homo sapiens (human)]

Official Symbol RAC2

Synonyms

RAC2; ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2); ras-related C3 botulinum toxin substrate 2; EN 7; p21-Rac2; small G protein; rho family, small GTP binding protein Rac2; Ras-related C3 botulinum toxin substrate 3 (rho family, small GTP-binding protein Rac2); Gx; EN-7; HSPC022

Gene ID 5880

mRNA Refseq NM_002872

Protein Refseq NP_002863

MIM 602049

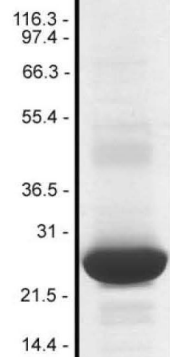
UniProt ID P15153

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**His-Rac2 protein
purity determination.**



A 10 μ g sample of RC01 (His-Rac2 molecular weight approx. 22 kDa) was separated by electrophoresis in a 12% SDS-PAGE system. The protein was stained with Coomassie Blue.

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