



## Product Datasheet

<b>Product Name</b>	Ras-Related C3 Botulinum Toxin Substrate 2 Human Recombinant
<b>Cata No</b>	CB501076
<b>Source</b>	<i>Escherichia Coli</i> .
<b>Synonyms</b>	Ras-related C3 botulinum toxin substrate 2, p21-Rac2, Small G protein, GX, RAC2, HSPC022, EN-7.

### Description

RAC2 is a small signaling G protein/GTPase which is part of the RAS superfamily of small GTP-binding proteins which regulate cell growth, actin cytoskeletal organization, cell proliferation, survival, cell cycle progression, gene transcription regulation and the activation of protein kinases. RAC2 cycles between an active gtp-bound and inactive gdp-bound state. In active state, RAC2 binds to a variety of effector proteins to regulate cellular responses, such as secretory processes, phagocytose of apoptotic cells and epithelial cell polarization. RAC2 is involved in the regulation of the nadph oxidase.

Recombinant RAC2 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 419 amino acids and having a molecular mass of 47 kDa. RAC2 is fused to GST and purified by conventional chromatography techniques.

### Physical Appearance

Sterile filtered colorless solution.

### Purity

Greater than 90.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

### Formulation

The RAC2 protein solution (1mg/ml) contains 1x PBS pH-7.4.

### Stability

Store at 4°C if entire vial will be used within 2-4 weeks.

Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Avoid multiple freeze-thaw cycles.**

### Sequence

MSPILGYWKI KGLVQPTRL L LEYLEEKYEE  
HLYERDEGDK WRNKKFELGL EFPNLPYYID  
GDVKLTQSMA IIRYIADKHN MLGGCPKERA  
EISMLEGAVL DIRYGVSRIA YSKDFETLKV  
DFLSKLPEML KMFEDRLCHK TYLNGDHVTH  
PDFMLYDALD VVLYMDPMCL DAFPKLVCFK  
KRIEAIQID KYLKSSKYIA WPLQGWQATF  
GGGDHPPKSD LVPRGSHMQA IKCVVVGDA  
VGKTCLLISY TTNAFPGEYI PTVFDNYSAN  
VMVDSKPVNL GLWDTAGQED YDRLRPLSYP  
QTDVFLICFS LVSPASYENV RAKWFPEVRH  
HCPSTPIILV GTKLDLRDDK DTIEKLKEKK  
LAPITYPQGL ALAKEIDSVK YLECSALTQR  
GLKTVFDEAI RAV  
LCPQPTR QQKRACSL.



# California Bioscience

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83103 Avenue 48, Ste.1B #204  
Coachella, CA 92236 USA  
Phone : +1.6268339877  
Email : [info@cali-bio.com](mailto:info@cali-bio.com)

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