



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

RAC-1 PROTEIN **Human, Recombinant**

Product Number **R 3012**
Storage Temperature -70°C

Product Description

Rac-1 is produced from a cDNA clone encoding the human Rac-1 protein, overexpressed in *E. coli*. Rac-1 is a small GTP-binding protein (20.5 kDa) that is a member of the ras gene superfamily and Rho family of proteins. Rac-1 protein is involved in the regulation of a variety of signaling pathways that control cell growth and differentiation. It has been shown to mediate cell membrane ruffling and actin stress fiber formation, regulate nuclear factors in activated T cells, and regulate the JNK and MAP kinase pathways. Rac-1 is also required for oncogenic Ras-mediated changes of the actin cytoskeleton in fibroblasts. Mutated forms of the RAC-1 protein can act as a weak oncogene, inducing malignant transformation of cells. Rac-1 is an authentic substrate for geranylgeranyltransferase.

Reagents

Rac-1 is supplied as purified protein (0.5-2 mg/ml) in a solution of 20 mM Tris-HCl (pH 8.0 at 4°C), 45 mM NaCl, 5 mM MgCl₂, 1 mM DTT, 50% glycerol.

Storage/Stability

Store at -70°C for long term storage. After thawing store at -20°C in aliquots. Repeated freezing and thawing is not recommended.

References

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