



Recombinant Protein Technical Manual

Recombinant Human RAC2 Protein (His Tag)

RPES3620

Product Data:

Product SKU: RPES3620

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: P15153

Protein Information:

Molecular Mass: 22.6 kDa

AP Molecular Mass: 25 kDa

Tag: N-His

Bio-activity:

Purity: > 94 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, 20% glycerol, pH 7.5

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: EN-7;Gx;HSPC022;p21-Rac2

Immunogen Information:

Sequence: Met 1-Cys 189

Background:

Ras-related C3 botulinum toxin substrate 2 (Rac2) is a small G-protein belonging to the Ras subfamily of the GTPase family. Rac2 acts as an "on / off" switch for signal transduction cascades and motilities. When GDP is attached to the small G-protein, the enzyme is inactivated. Release of the GDP and replace of the GTP activate the GTPase. Rac2 remains active until the GTP is hydrolyzed to GDP. Rac2 is a hematopoietic-specific Rho family GTPase implicated as an important constituent of the NADPH oxidase complex and shares 92% amino acid identity with the ubiquitously expressed Rac1. The small G-protein Rac2 regulates the rearrangements of actin and membrane necessary for Fcγ receptor-mediated phagocytosis by macrophages. Activated Rac2 binds to the p21-binding domain of PAK1 and this binding provided a basis for microscopic methods to localize activation of these G proteins inside cells.