

Product datasheet for **TA322940**

RAC2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:500-2000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Fusion protein corresponding to a region derived from 50-192 amino acids of human ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)
Formulation:	PBS pH7.3, 0.05% NaN ₃ , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	21 kDa
Gene Name:	ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)
Database Link:	NP_002863 Entrez Gene 19354 MouseEntrez Gene 366957 RatEntrez Gene 5880 Human P15153



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Background:

Rac and Cdc42 are members of the Rho-GTPase family. In mammals, Rac exists as three isoforms, Rac1, Rac2 and Rac3, which are highly similar in sequence. Rac1 and Cdc42, the most widely studied of this group, are ubiquitously expressed. Rac2 is expressed in cells of hematopoietic origin, and Rac3, while highly expressed in brain, is also found in many other tissues. Rac and Cdc42 play key signaling roles in cytoskeletal reorganization, membrane trafficking, transcriptional regulation, cell growth and development. GTP binding stimulates the activity of Rac/Cdc42, and the hydrolysis of GTP to GDP through the protein's intrinsic GTPase activity, rendering it inactive. GTP hydrolysis is aided by GTPase activating proteins (GAPs), while exchange of GDP for GTP is facilitated by guanine nucleotide exchange factors (GEFs). Another level of regulation is achieved through the binding of RhoGDI, a guanine nucleotide dissociation inhibitor, which retains Rho family GTPases, including Rac and Cdc42, in their inactive GDP-bound state.

Synonyms:

EN-7; Gx; HSPC022; p21-Rac2

Protein Families:

Druggable Genome

Protein Pathways:

Adherens junction, Axon guidance, B cell receptor signaling pathway, Chemokine signaling pathway, Colorectal cancer, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Leukocyte transendothelial migration, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, Pancreatic cancer, Pathways in cancer, Regulation of actin cytoskeleton, VEGF signaling pathway, Viral myocarditis, Wnt signaling pathway

Product images:

Predicted band size: 21 kDa. Positive control: Jurkat and HL-60 cell lysate. Recommended dilution: 1/500-2000. (Gel: 10%SDS-PAGE Lane 1: Jurkat cell lysate Lane 2: HL-60 cell lysate Lysates: 40 ug per lane Primary antibody: 1/500 dilution Secondary antibody: Goat anti Rabbit IgG - H&L (HRP) at 1/10000 dilution Exposure time: 1 minute)