

## Product datasheet for **TA326982S**

### CDC42 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	WB: 1:500-1:2000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human CDC42
Formulation:	PBS with 0.09% Sodium azide, 50% glycerol, pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	cell division cycle 42
Database Link:	<a href="#">NP_001782</a> <a href="#">Entrez Gene 12540 Mouse</a> <a href="#">Entrez Gene 64465 Rat</a> <a href="#">Entrez Gene 998 Human</a> <a href="#">P60953</a>



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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 proteins 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:**

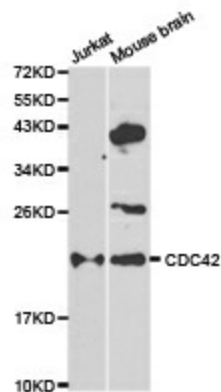
CDC42Hs; G25K

**Protein Families:**

Druggable Genome

**Protein Pathways:**

Adherens junction, Axon guidance, Chemokine signaling pathway, Endocytosis, Epithelial cell signaling in Helicobacter pylori infection, Fc gamma R-mediated phagocytosis, Focal adhesion, GnRH signaling pathway, Leukocyte transendothelial migration, MAPK signaling pathway, Neurotrophin signaling pathway, Pancreatic cancer, Pathogenic Escherichia coli infection, Pathways in cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway, Tight junction, VEGF signaling pathway

**Product images:**

Western blot analysis of extracts of various cell lines, using CDC42 antibody.