

ADCK4 (T-14): sc-167053

BACKGROUND

ADCK4 (aarF domain containing kinase 4) is a 544 amino acid single-pass membrane protein belonging to the protein kinase superfamily and the ADCK protein kinase family. The ADCK family consists of five paralogs in human (ADCK1-5). ADCK4 is very similar to ADCK3, with both possibly resulting from a gene duplication in vertebrates. Encoded by a gene that maps to human chromosome 19q13.2, ADCK4 contains one protein kinase domain and exists as two alternatively spliced isoforms. ADCK4 participates in kinase functions, protein serine/threonine kinase activities and transferase roles. ADCK4 may be involved in regulation of CoQ10 synthesis and likely demonstrates cancer-specific immunological responses.

REFERENCES

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2. Bamborough, P., et al. 2008. Assessment of chemical coverage of kinome space and its implications for kinase drug discovery. *J. Med. Chem.* 51: 7898-7914.
3. Simpson, K.J., et al. 2008. Identification of genes that regulate epithelial cell migration using an siRNA screening approach. *Nat. Cell Biol.* 10: 1027-1038.
4. Onouchi, Y., et al. 2008. ITPKC functional polymorphism associated with Kawasaki disease susceptibility and formation of coronary artery aneurysms. *Nat. Genet.* 40: 35-42.
5. Geng, L., et al. 2008. Identification of metastasis associated antigen 1 (MTA1) by serological screening of prostate cancer cDNA libraries. *Open Biochem. J.* 2: 100-107.
6. Hata, A., et al. 2009. Susceptibility genes for Kawasaki disease: toward implementation of personalized medicine. *J. Hum. Genet.* 54: 67-73.
7. Baldwin, A., et al. 2010. Kinase requirements in human cells: V. Synthetic lethal interactions between p53 and the protein kinases SGK2 and PAK3. *Proc. Natl. Acad. Sci. USA* 107: 12463-12468.

CHROMOSOMAL LOCATION

Genetic locus: ADCK4 (human) mapping to 19q13.2; Adck4 (mouse) mapping to 7 A3.

SOURCE

ADCK4 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ADCK4 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167053 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ADCK4 (T-14) is recommended for detection of ADCK4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ADCK family members.

ADCK4 (T-14) is also recommended for detection of ADCK4 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ADCK4 siRNA (h): sc-97098, ADCK4 siRNA (m): sc-140876, ADCK4 shRNA Plasmid (h): sc-97098-SH, ADCK4 shRNA Plasmid (m): sc-140876-SH, ADCK4 shRNA (h) Lentiviral Particles: sc-97098-V and ADCK4 shRNA (m) Lentiviral Particles: sc-140876-V.

Molecular Weight of ADCK4: 60 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.