

ADCK2 (C-16): sc-130113

BACKGROUND

ADCK2 (aarF domain containing kinase 2), also known as AARF, is a 626 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). Encoded by a gene that maps to human chromosome 7q34, ADCK2 contains one protein kinase domain. ADCK2 participates in ATP and nucleotide binding, transferase functions and protein serine/threonine kinase activities. Expression of ADCK2 inversely correlates with cellular viability, suggesting elevated expression of ADCK2 may be essential for tumour survival. ADCK2 is necessary for cell proliferation of glioblastoma multiforme (GBM), a fatal primary brain tumor containing countless genetic and epigenetic alterations.

REFERENCES

1. Yue, Y., Grossmann, B., Holder, S.E. and Haaf, T. 2005. De novo t(7;10)(q33;q23) translocation and closely juxtaposed microdeletion in a patient with macrocephaly and developmental delay. *Hum. Genet.* 117: 1-8.
2. James, M.R., Roth, R.B., Shi, M.M., Kammerer, S., Nelson, M.R., Stark, M.S., Dumenil, T., Montgomery, G.W., Hayward, N.K., Martin, N.G., Braun, A. and Duffy, D.L. 2005. BRAF polymorphisms and risk of melanocytic neoplasia. *J. Invest. Dermatol.* 125: 1252-1258.
3. López, L.C., Schuelke, M., Quinzii, C.M., Kanki, T., Rodenburg, R.J., Naini, A., Dimauro, S. and Hirano, M. 2006. Leigh syndrome with nephropathy and CoQ10 deficiency due to decaprenyl diphosphate synthase subunit 2 (PDSS2) mutations. *Am. J. Hum. Genet.* 79: 1125-1129.
4. Sievert, A.J., Jackson, E.M., Gai, X., Hakonarson, H., Judkins, A.R., Resnick, A.C., Sutton, L.N., Storm, P.B., Shaikh, T.H. and Biegel, J.A. 2009. Duplication of 7q34 in pediatric low-grade astrocytomas detected by high-density single-nucleotide polymorphism-based genotype arrays results in a novel BRAF fusion gene. *Brain Pathol.* 19: 449-458.
5. Iorns, E., Lord, C.J., Grigoriadis, A., McDonald, S., Fenwick, K., Mackay, A., Mein, C.A., Natrajan, R., Savage, K., Tamber, N., Reis-Filho, J.S., Turner, N.C. and Ashworth, A. 2009. Integrated functional, gene expression and genomic analysis for the identification of cancer targets. *PLoS ONE* 4: e5120.
6. Fujiwara, Y., Honda, A. and Satoh, M. 2010. DNA microarray gene expression analysis of human vascular endothelial cells exposed to arsenite. *J. Toxicol. Sci.* 35: 275-278.

CHROMOSOMAL LOCATION

Genetic locus: ADCK2 (human) mapping to 7q34; Adck2 (mouse) mapping to 6 B1.

SOURCE

ADCK2 (C-16) is a purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of ADCK2 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ADCK2 (C-16) is recommended for detection of ADCK2 of mouse and human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

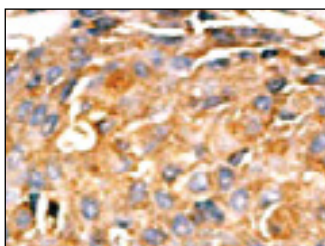
Suitable for use as control antibody for ADCK2 siRNA (h): sc-89682, ADCK2 siRNA (m): sc-140875, ADCK2 shRNA Plasmid (h): sc-89682-SH, ADCK2 shRNA Plasmid (m): sc-140875-SH, ADCK2 shRNA (h) Lentiviral Particles: sc-89682-V and ADCK2 shRNA (m) Lentiviral Particles: sc-140875-V.

Molecular Weight of ADCK2: 69 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 2) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ADCK2 (C-16): sc-130113. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cancer tissue showing cytoplasmic staining.

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.