SANTA CRUZ BIOTECHNOLOGY, INC.

KIAA1462 (T-12): sc-168351

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

KIAA1462, also known as JCAD (junctional protein associated with coronary artery disease), is a 1,359 amino acid protein that colocalizes with VE-Cadherin specifically in endothelial cells and not epithelial cells. KIAA1462 is post-translationally phosphorylated at four serine residues and is in involved celluar adhesion. The gene encoding KIAA1462 maps to human chromosome 10p11.23, which contains over 800 genes and 135 million nucleotides, making up nearly 4.5% of the human genome. PTEN is an important tumor suppressor gene located on chromosome 10 and, when defective, causes a genetic predisposition to cancer development known as Cowden syndrome. The chromosome 10 encoded gene ERCC6 is important for DNA repair and is linked to Cockayne syndrome which is characterized by extreme photosensitivity and premature aging. Tetrahydrobiopterin deficiency and a number of syndromes involving defective skull and facial bone fusion are also linked to chromosome 10. As with most trisomies, trisomy 10 is rare and is deleterious.

REFERENCES

1. Troelstra, C., et al. 1992. Localization of the nucleotide excision repair gene ERCC6 to human chromosome 10q11-q21. Genomics 12: 745-749.
2. Berger, P., et al. 2002. Molecular cell biology of Charcot-Marie-Tooth disease. Neurogenetics 4: 1-15.
3. Teresi, R.E., et al. 2007. Cowden syndrome-affected patients with PTEN promoter mutations demonstrate abnormal protein translation. Am. J. Hum. Genet. 81: 756-767.
4. Bechtel, S., et al. 2007. The full-ORF clone resource of the German cDNA Consortium. BMC Genomics 8: 399.

CHROMOSOMAL LOCATION

Genetic locus: KIAA1462 (human) mapping to 10p11.23; 9430020K01Rik (mouse) mapping to 18 A1.

SOURCE

KIAA1462 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of KIAA1462 of human origin.

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-168351 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

RESEARCH USE

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

APPLICATIONS

KIAA1462 (T-12) is recommended for detection of KIAA1462 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 KIAA family members.

KIAA1462 (T-12) is also recommended for detection of KIAA1462 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for KIAA1462 siRNA (m): sc-146454, KIAA1462 shRNA Plasmid (m): sc-146454-SH and KIAA1462 shRNA (m) Lentiviral Particles: sc-146454-V.

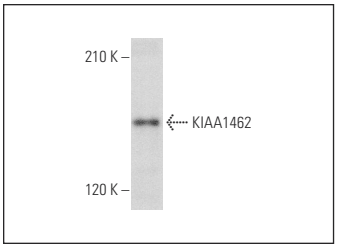
Molecular Weight of KIAA1462: 148 kDa.

Positive Controls: U-698-M whole cell lysate: sc-364799.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



KIAA1462 (T-12): sc-168351. Western blot analysis of KIAA1462 expression in U-698-M whole cell lysate.

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **KIAA1462 (F-7): sc-515169**, our highly recommended monoclonal alternative to KIAA1462 (T-12).