SANTA CRUZ BIOTECHNOLOGY, INC.

EVA1C (G-17): sc-83563



BACKGROUND

EVA1C is a 440 amino acid single-pass membrane protein that contains 2 SUEL-type lectin domains and is ubiquitously expressed. EVA1C is glycosylated at asparagine residues 62, 109 and 165, and post-translationally phosphorylated at serine 364. EVA1C is alternatively spliced in to three isoforms and is encoded by a gene that maps to mouse chromosome 16. The gene encoding human EVA1C maps to chromosome 21, which houses approximately 300 genes and comprises nearly 1.5% of the human genome. Chromosome 21-associated disorders include Alzheimer's disease, amyotrophic lateral sclerosis and, most notably, Down syndrome (also known as trisomy 21).

REFERENCES

- Reymond, A., Friedli, M., Henrichsen, C.N., Chapot, F., Deutsch, S., Ucla, C., Rossier, C., Lyle, R., Guipponi, M. and Antonarakis, S.E. 2001. From PREDs and open reading frames to cDNA isolation: revisiting the human chromosome 21 transcription map. Genomics 78: 46-54.
- Mao, R., Wang, X., Spitznagel, E.L., Frelin, L.P., Ting, J.C., Ding, H., Kim, J.W., Ruczinski, I., Downey, T.J. and Pevsner, J. 2005. Primary and secondary transcriptional effects in the developing human Down syndrome brain and heart. Genome Biol. 6: R107.
- Robakis, N.K. 2006. The discovery and mapping to chromosome 21 of the Alzheimer's amyloid gene: history revised. J. Alzheimers Dis. 10: 453-455.
- Aït Yahya-Graison, E., Aubert, J., Dauphinot, L., Rivals, I., Prieur, M., Golfier, G., Rossier, J., Personnaz, L., Creau, N., Bléhaut, H., Robin, S., Delabar, J.M. and Potier, M.C. 2007. Classification of human chromosome 21 gene-expression variations in Down syndrome: impact on disease phenotypes. Am. J. Hum. Genet. 81: 475-491.
- Zanivan, S., Gnad, F., Wickström, S.A., Geiger, T., Macek, B., Cox, J., Fässler, R. and Mann, M. 2008. Solid tumor proteome and phosphoproteome analysis by high resolution mass spectrometry. J. Proteome Res. 7: 5314-5326.
- Sreedharan, J., Blair, I.P., Tripathi, V.B., Hu, X., Vance, C., Rogelj, B., Ackerley, S., Durnall, J.C., Williams, K.L., Buratti, E., Baralle, F., de Belleroche, J., Mitchell, J.D., Leigh, P.N., Al-Chalabi, A., Miller, C.C., Nicholson, G. and Shaw, C.E. 2008. TDP-43 mutations in familial and sporadic amyotrophic lateral sclerosis. Science 319: 1668-1672.

CHROMOSOMAL LOCATION

Genetic locus: EVA1C (human) mapping to 21q22.11; Eva1c (mouse) mapping to 16 C3.3.

SOURCE

EVA1C (G-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an extracellular domain of EVA1C of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-83563 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EVA1C (G-17) is recommended for detection of EVA1C 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 isoform B.

EVA1C (G-17) is also recommended for detection of EVA1C in additional species, including porcine.

Suitable for use as control antibody for EVA1C siRNA (h): sc-91400, C21orf63 siRNA (m): sc-140224, EVA1C shRNA Plasmid (h): sc-91400-SH, C21orf63 shRNA Plasmid (m): sc-140224-SH, EVA1C shRNA (h) Lentiviral Particles: sc-91400-V and C21orf63 shRNA (m) Lentiviral Particles: sc-140224-V.

Molecular Weight of EVA1C isoforms: 49/44/39 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluo-rescence: 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.

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.