SANTA CRUZ BIOTECHNOLOGY, INC.

UNC5CL (S-16): sc-163506



BACKGROUND

The UNC5 family of proteins are involved in netrin-mediated signaling events in blood vessel patterning, axonal migrations, and apoptosis. Members of this family generally contain three domains, ZU5, UPA, and death domain (DD), which are important to UNC5 protein function. UNC5CL (UNC5C-like protein), also known as protein UNC5 homolog C-like or zud (ZU5 and death domain-containing protein), is a 518 amino acid single-pass type III membrane protein that belongs to the UNC5 family and contains one death domain and a ZU5 domain. Localizing to cytoplasm as well as membrane, UNC5CL impairs NF κ B binding to its targets thus inhibiting NF κ B -dependent transcription. UNC5CL exists as four alternatively spliced isoforms.

REFERENCES

- Freyssinet, G., Harris, G.C., Nasatir, M. and Schiff, J.A. 1979. Events surrounding the early development of euglena chloroplasts: 14. biosynthesis of cytochrome C-552 in wild type and mutant cells. Plant Physiol. 63: 908-915.
- 2. Zhang, J., Xu, L.G., Han, K.J. and Shu, H.B. 2004. Identification of a ZU5 and death domain-containing inhibitor of NF κ B. J. Biol. Chem. 279: 17819-17825.
- Carninci, P., Kasukawa, T., Katayama, S., Gough, J., Frith, M.C., Maeda, N., Oyama, R., Ravasi, T., Lenhard, B., Wells, C., Kodzius, R., Shimokawa, K., Bajic, V.B., Brenner, S.E., Batalov, S., Forrest, A.R., Zavolan, M., et al. 2005. The transcriptional landscape of the mammalian genome. Science 309: 1559-1563.
- Wang, R., Wei, Z., Jin, H., Wu, H., Yu, C., Wen, W., Chan, L.N., Wen, Z. and Zhang, M. 2009. Autoinhibition of UNC5b revealed by the cytoplasmic domain structure of the receptor. Mol. Cell 33: 692-703.
- Lü, D., Qian, X.P., Tian, X.J., Zhang, Y. and Zhang, J. 2010. Prokaryotic expression, purification and preparation of polyclonal antibody for human UNC5CL. Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi 26: 242-245.
- Diez-Roux, G., Banfi, S., Sultan, M., Geffers, L., Anand, S., Rozado, D., Magen, A., Canidio, E., Pagani, M., Peluso, I., Lin-Marq, N., Koch, M., Bilio, M., Cantiello, I., Verde, R., De Masi, C., Bianchi, S.A., Cicchini, J., et al. 2011. A high-resolution anatomical atlas of the transcriptome in the mouse embryo. PLoS Biol. 9: e1000582.

CHROMOSOMAL LOCATION

Genetic locus: UNC5CL (human) mapping to 6p21.1; Unc5cl (mouse) mapping to 17 C.

SOURCE

UNC5CL (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of UNC5CL of mouse origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-163506 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UNC5CL (S-16) is recommended for detection of UNC5CL of mouse origin and ZUD of 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 UNC5 family members.

UNC5CL (S-16) is also recommended for detection of ZUD in additional species, including bovine.

Suitable for use as control antibody for ZUD siRNA (h): sc-95528, UNC5CL siRNA (m): sc-154921, ZUD shRNA Plasmid (h): sc-95528-SH, UNC5CL shRNA Plasmid (m): sc-154921-SH, ZUD shRNA (h) Lentiviral Particles: sc-95528-V and UNC5CL shRNA (m) Lentiviral Particles: sc-154921-V.

Molecular Weight of UNC5CL isoforms 1/2/3/4: 58/20/12/18 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) Immunofluo-rescence: 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.

PROTOCOLS

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