

VWC2 (C-17): sc-138721

BACKGROUND

VWC2 (von Willebrand factor C domain containing 2), also known as brorin or brain-specific chordin-like protein, is a 325 amino acid secreted protein that contains two VWFC domains and belongs to the Chordin family. VWC2 expression increases during brain development, with strong levels found in neurons of the diencephalon and medulla oblongata. Acting as a bone morphogenetic protein (BMP) antagonist, VWC2 inhibits the activities of BMP-2 and BMP-6 during neurogenesis in adult and developing neural tissues, and may play a role in neural development and function. VWC2 may also have a role in promoting cell adhesion. The gene encoding VWC2 maps to human chromosome 7p12.2. Chromosome 7 is approximately 158 million base pairs long, encodes over 1,000 genes, and makes up about 5% of the human genome. Chromosome 7 has been linked to many diseases, including osteogenesis imperfecta, Pendred syndrome, Lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: VWC2 (human) mapping to 7p12.2; Vwc2 (mouse) mapping to 11 A1.

SOURCE

VWC2 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of VWC2 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-138721 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VWC2 (C-17) is recommended for detection of VWC2 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 VWC1 or VWCE.

VWC2 (C-17) is also recommended for detection of VWC2 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for VWC2 siRNA (h): sc-89641, VWC2 siRNA (m): sc-155237, VWC2 shRNA Plasmid (h): sc-89641-SH, VWC2 shRNA Plasmid (m): sc-155237-SH, VWC2 shRNA (h) Lentiviral Particles: sc-89641-V and VWC2 shRNA (m) Lentiviral Particles: sc-155237-V.

Molecular Weight of VWC2: 35 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.

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.

PROTOCOLS

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