

Crossveinless-2 (Y-20): sc-54172

BACKGROUND

Crossveinless-2, also known as BMP-binding endothelial regulator protein, Cv12 or Cv2, is a member of the chordin family. It is an evolutionarily conserved protein that was first identified in *Drosophila*, where it is required for the formation of cross-veins in the wing. Crossveinless-2 is a developmentally secreted glycoprotein that contains a trypsin inhibitory-like (TIL) domain, five von Willebrand factor type C (VWF) domains and one VWF type D (VWFD) domain. Crossveinless-2 regulates BMP homeostasis in early vertebrate embryonic tissues via its cysteine-rich BMP-binding domains. It is expressed during development at sites of high BMP signaling and its expression is responsive to this signaling, thereby providing positive feedback. Crossveinless-2 directly interacts with BMP4 and BMP2 and can function either to enhance or inhibit BMP signaling. Crossveinless-2 may function to promote BMP signaling by aiding in ligand transport.

CHROMOSOMAL LOCATION

Genetic locus: BMPER (human) mapping to 7p14.3; Bmper (mouse) mapping to 9 A3.

SOURCE

Crossveinless-2 (Y-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Crossveinless-2 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-54172 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.

APPLICATIONS

Crossveinless-2 (Y-20) is recommended for detection of Crossveinless-2 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), 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).

Crossveinless-2 (Y-20) is also recommended for detection of Crossveinless-2 in additional species, including equine, canine, bovine, porcine and avian.

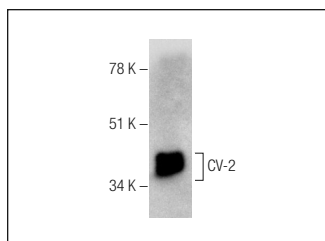
Suitable for use as control antibody for Crossveinless-2 siRNA (h): sc-72318, Crossveinless-2 siRNA (m): sc-72319, Crossveinless-2 shRNA Plasmid (h): sc-72318-SH, Crossveinless-2 shRNA Plasmid (m): sc-72319-SH, Crossveinless-2 shRNA (h) Lentiviral Particles: sc-72318-V and Crossveinless-2 shRNA (m) Lentiviral Particles: sc-72319-V.

Molecular Weight of Crossveinless-2: 80 kDa.

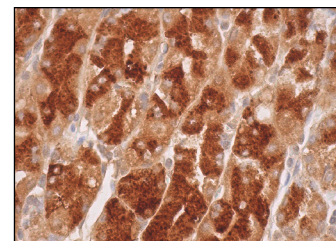
RECOMMENDED SECONDARY REAGENTS

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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Crossveinless-2 (Y-20): sc-54172. Western blot analysis of human recombinant CV-2.



Crossveinless-2 (Y-20): sc-54172. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lower stomach tissue showing cytoplasmic staining of glandular cells.

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.



Try **Crossveinless-2 (G-8): sc-377502**, our highly recommended monoclonal alternative to Crossveinless-2 (Y-20).