

CRIM2 (M-17): sc-242516

BACKGROUND

CRIM2 (cysteine-rich motor neuron 2 protein), also known as cysteine-rich BMP regulator 2, NET67, KCP (kielin/chordin-like protein) or KCP-1, is a 1,503 amino acid secreted protein that enhances BMP (bone morphogenetic protein) signaling. Expressed in kidney and brain, CRIM2 inhibits TGF β 1 and Activin A-mediated signaling pathways. CRIM2 contains one VWFD domain, a TIL (Trypsin inhibitory-like) domain, seventeen VWFC domains and exists as two alternatively spliced isoforms. The gene encoding CRIM2 maps to human chromosome 7, which houses over 1,000 genes, comprises nearly 5% of the human genome and has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, Citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

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3. Lin, J., Patel, S.R., Cheng, X., Cho, E.A., Levitan, I., Ullenbruch, M., Phan, S.H., Park, J.M. and Dressler, G.R. 2005. Kielin/chordin-like protein, a novel enhancer of BMP signaling, attenuates renal fibrotic disease. *Nat. Med.* 11: 387-393.
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5. Reiner, O., Sapoznik, S. and Sapir, T. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. *Neuromolecular Med.* 8: 547-565.
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CHROMOSOMAL LOCATION

Genetic locus: KCP (human) mapping to 7q32.1; Kcp (mouse) mapping to 6 A3.3.

SOURCE

CRIM2 (M-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of CRIM2 of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-242516 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

CRIM2 (M-17) is recommended for detection of CRIM2 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).

CRIM2 (M-17) is also recommended for detection of CRIM2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CRIM2 siRNA (h): sc-89514, Crim2 siRNA (m): sc-142570, CRIM2 shRNA Plasmid (h): sc-89514-SH, Crim2 shRNA Plasmid (m): sc-142570-SH, CRIM2 shRNA (h) Lentiviral Particles: sc-89514-V and Crim2 shRNA (m) Lentiviral Particles: sc-142570-V.

Molecular Weight of CRIM2 isoforms: 160/32 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.

PROTOCOLS

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