# CRIM1 (Q-15): sc-167546



The Power to Question

#### **BACKGROUND**

CRIM1 (cysteine-rich motor neuron 1) is a glycosylated type I transmembrane protein expressed in pericytes surrounding the arterial vasculature, podocytes, parietal cells, and mesangial cells of the glomerulus and in the developing spinal cord. It consists of six chordin-like cysteine-rich repeats (CRRs) and an N-terminal Insulin-like growth factor binding protein-like motif. The CRRs are contained in the extracellular domain which can be cleaved and released as a secreted ectodomain from the cell membrane. CRIM1 may be involved in the regulation of BMP signaling activity in kidney as well as various other tissues. CRIM1 interacts with BMP4 and BMP7 via the CRRs and functions as an antagonist. This interaction leads to the tethering of pre-BMP to the cell surface and reduced production, processing and secretion of mature BMP. In addition, CRIM1 may also play a role in capillary formation and maintenance during angiogenesis.

# **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: CRIM1 (human) mapping to 2p22.3; Crim1 (mouse) mapping to 17 E2.

#### **SOURCE**

CRIM1 (Q-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of CRIM1 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167546 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

CRIM1 (Q-15) is recommended for detection of CRIM1 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 CRIM2.

CRIM1 (Q-15) is also recommended for detection of CRIM1 in additional species, including equine.

Suitable for use as control antibody for CRIM1 siRNA (h): sc-94828, CRIM1 siRNA (m): sc-142569, CRIM1 shRNA Plasmid (h): sc-94828-SH, CRIM1 shRNA Plasmid (m): sc-142569-SH, CRIM1 shRNA (h) Lentiviral Particles: sc-94828-V and CRIM1 shRNA (m) Lentiviral Particles: sc-142569-V.

Molecular Weight of CRIM1: 140 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.



Try **CRIM1 (CREX-2):** sc-73860, our highly recommended monoclonal alternative to CRIM1 (Q-15).