

BMPR-I (C-16): sc-5678

BACKGROUND

Members of the transforming growth factor β superfamily bind to a pair of transmembrane proteins, known as receptor types I and II, which contain serine/threonine kinases and associate to form a signaling complex. Two type I receptors have been characterized, BMPR-IA (also designated SKR5, ALK-3, and BRK-1) and BMPR-IB (also designated ALK-6 and SKR 6), that bind to bone morphogenetic proteins (BMP)-2, BMP-4, and osteogenic protein (OP)-1 (also designated BMP-7). BMPR-IA and BMPR-IB are both expressed in human glioma cell lines. The type II receptor, BMPR-II, efficiently binds to OP-1 and BMP-2 and weakly binds BMP-4, and it is widely expressed in different tissues, including brain. The BMP receptor family members are thought to mediate distinct effects on gene expression, cell differentiation, and morphogenesis in a dose dependent fashion.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: BMPR1A (human) mapping to 10q22.3; Bmpr1a (mouse) mapping to 14 B.

SOURCE

BMPR-I (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BMPR-I of human 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 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-5678 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BMPR-I (C-16) is recommended for detection of BMPR-IA and BMPR-IB 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).

BMPR-I (C-16) is also recommended for detection of BMPR-IA and BMPR-IB in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of BMPR-I: 50-55 kDa.

Positive Controls: c4 whole cell lysate: sc-364186.

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.

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.

MONOS
Satisfaction
Guaranteed

Try **BMPR-IA (7K7): sc-134285** or **BMPR-IB (2E2): sc-293428**, our highly recommended monoclonal alternatives to BMPR-I (C-16).