

BMPR-II (G-17): sc-5682

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.

CHROMOSOMAL LOCATION

Genetic locus: BMPR2 (human) mapping to 2q33.1; Bmpr2 (mouse) mapping to 1 C1.3.

SOURCE

BMPR-II (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of BMPR-II of human 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-5682 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BMPR-II (G-17) is recommended for detection of BMPR-II of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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-II (G-17) is also recommended for detection of BMPR-II in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BMPR-II siRNA (h): sc-40220, BMPR-II siRNA (m): sc-40221, BMPR-II shRNA Plasmid (h): sc-40220-SH, BMPR-II shRNA Plasmid (m): sc-40221-SH, BMPR-II shRNA (h) Lentiviral Particles: sc-40220-V and BMPR-II shRNA (m) Lentiviral Particles: sc-40221-V.

Molecular Weight of BMPR-II: 115 kDa.

Positive Controls: TE671 cell lysate: sc-2416, IMR-32 cell lysate: sc-2409 or mouse heart extract: sc-2254.

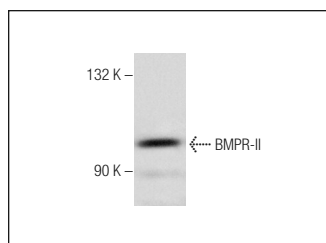
STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

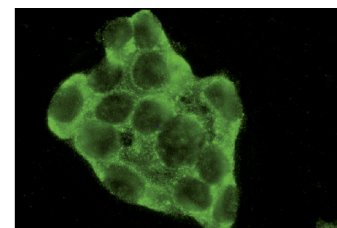
RESEARCH USE

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

DATA



BMPR-II (G-17): sc-5682. Western blot analysis of BMPR-II expression in TE671 whole cell lysate.



BMPR-II (G-17): sc-5682. Immunofluorescence staining of methanol-fixed Hep G2 cells showing membrane localization.

SELECT PRODUCT CITATIONS

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- Deng, H., et al. 2007. Bone morphogenetic protein-4 is overexpressed in colonic adenocarcinomas and promotes migration and invasion of HCT116 cells. *Exp. Cell Res.* 313: 1033-1044.
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Try **BMPR-II (E-1): sc-393304** or **BMPR-II (Z-18): sc-73752**, our highly recommended monoclonal alternatives to BMPR-II (G-17).