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 B RK-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: BMPR1B (human) mapping to 4q22.3; Bmpr1b (mouse) mapping to 3 H1.

SOURCE
BMPR-IB (H-44) is a rabbit polyclonal antibody raised against amino acids 15-58 of BMPR-IB 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.

APPLICATIONS
BMPR-IB (H-44) is recommended for detection of BMPR-IB of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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). BMPR-IB (H-44) is also recommended for detection of BMPR-IB in additional species, including equine, canine, bovine and porcine.

Molecular Weight of BMPR-IB: 45 kDa.

Positive Controls: DU 145 cell lysate: sc-2268, LNCaP cell lysate: sc-2231 or PC-3 cell lysate: sc-2220.

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

SELECT PRODUCT CITATIONS

Try BMPR-IB (2E2): sc-293428, our highly recommended monoclonal alternative to BMPR-IB (H-44).