

## BRS-3 (H-58): sc-98838

### BACKGROUND

Bombesin receptor subtype-3 (BRS-3) is an integral membrane protein belonging to the G protein-coupled receptor 1 family. The gene encoding for the BRS-3 protein maps against chromosome Xq26.3. BRS-3 is important in sperm cell division, maturation and function. Its actions are mediated by G protein interactions which activate a phosphatidylinositol-calcium second messenger system. BRS-3 is expressed in germ cells in testis and in lung carcinoma cells. Unlike other bombesin proteins, BRS-3 does not seem to be detected in the gut and central nervous system, but has been found in rat gastrointestinal tract. Mice lacking the gene encoding for BRS-3 develop obesity, suggesting that BRS-3 may play a role in the regulation of plasma Insulin concentration.

### REFERENCES

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2. Gorbulev, V., Akhundova, A., Grzeschik, K.H. and Fahrenholz, F. 1994. Organization and chromosomal localization of the gene for the human bombesin receptor subtype expressed in pregnant uterus. *FEBS Lett.* 340: 260-264.
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6. Porcher, C., Juhem, A., Peinnequin, A. and Bonaz, B. 2005. Bombesin receptor subtype-3 is expressed by the enteric nervous system and by interstitial cells of Cajal in the rat gastrointestinal tract. *Cell Tissue Res.* 320: 21-31.

### CHROMOSOMAL LOCATION

Genetic locus: BRS3 (human) mapping to Xq26.3; Brs3 (mouse) mapping to X A5.

### SOURCE

BRS-3 (H-58) is a rabbit polyclonal antibody raised against amino acids 27-84 mapping near the N-terminus of BRS-3 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

BRS-3 (H-58) is recommended for detection of Bombesin Receptor Subtype-3 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

BRS-3 (H-58) is also recommended for detection of Bombesin Receptor Subtype-3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BRS-3 siRNA (h): sc-44787, BRS-3 siRNA (m): sc-44788, BRS-3 shRNA Plasmid (h): sc-44787-SH, BRS-3 shRNA Plasmid (m): sc-44788-SH, BRS-3 shRNA (h) Lentiviral Particles: sc-44787-V and BRS-3 shRNA (m) Lentiviral Particles: sc-44788-V.

Molecular Weight of BRS-3: 44 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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](http://www.scbt.com) or our catalog for detailed protocols and support products.