BSMAP (D-14): sc-138839



The Power to Question

BACKGROUND

BSMAP (brain-specific membrane-anchored protein), also known as TMEM59L (transmembrane protein 59-like) or C19orf4, is a 342 amino acid type-I membrane glycoprotein that localizes to organelle membranes and belongs to the TMEM59 family. Expressed at high levels in brain tissue, BSMAP is thought to play a role in brain function and central nervous system activity. The gene encoding BSMAP maps to human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family and Fc receptors (FcRs).

REFERENCES

- Zimmermann, W., et al. 1988. Chromosomal localization of the carcinoembryonic antigen gene family and differential expression in various tumors. Cancer Res. 48: 2550-2554.
- Elson, G.C., et al. 1999. BSMAP, a novel protein expressed specifically in the brain whose gene is localized on chromosome 19p12. Biochem. Biophys. Res. Commun. 264: 55-62.
- LaPoint, S.F., et al. 2000. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). Adv. Anat. Pathol. 7: 307-321.
- 4. Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. Gene 241: 45-50.
- Buchet-Poyau, K., et al. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. Cytogenet. Genome Res. 97: 171-178.
- Moodie, S.J., et al. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and LILR gene clusters. Eur. J. Immunogenet. 29: 287-291.
- 7. Grimwood, J., et al. 2004. The DNA sequence and biology of human chromosome 19. Nature 428: 529-535.
- 8. Parham, P. 2005. Immunogenetics of killer cell immunoglobulin-like receptors. Mol. Immunol. 42: 459-462.

CHROMOSOMAL LOCATION

Genetic locus: TMEM59L (human) mapping to 19p13.11; Tmem59l (mouse) mapping to 8 B3.3.

SOURCE

BSMAP (D-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of BSMAP 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 100 μg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138839 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BSMAP (D-14) is recommended for detection of BSMAP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with TMEM59.

BSMAP (D-14) is also recommended for detection of BSMAP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BSMAP siRNA (h): sc-97876, BSMAP siRNA (m): sc-141762, BSMAP shRNA Plasmid (h): sc-97876-SH, BSMAP shRNA Plasmid (m): sc-141762-SH, BSMAP shRNA (h) Lentiviral Particles: sc-97876-V and BSMAP shRNA (m) Lentiviral Particles: sc-141762-V.

Molecular Weight of BSMAP: 40 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit lgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit lgG-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) Immunofluorescence: use goat anti-rabbit lgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit lgG-TR: sc-2780 (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.

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