

### **Brevican Antibody**

Brevican Antibody, Clone S294A-6 Catalog # ASM10262

### **Specification**

### **Brevican Antibody - Product Information**

Application ICC/IF, WB Primary Accession P55068

Other Accession NP 001028837.1

Host Mouse Isotype IgG2B Reactivity Mouse, Rat Clonality Monoclonal

Description

Mouse Anti-Rat Brevican Monoclonal IgG2B

### Target/Specificity

Detects ~140kDa (and smaller due to proteolytic cleavage).

### **Other Names**

BCAN Antibody, BEHAB Antibody, CSPG7 Antibody, Brain enriched hyaluronan binding protein Antibody, Brevican core protein Antibody, Brevican core protein isoform 1 Antibody, Brevican core protein isoform 2 Antibody, Brevican proteoglycan Antibody, Chondroitin sulfate proteoglycan 7 Antibody, Chondroitin sulfate proteoglycan BEHAB Antibody, MGC13038 Antibody

# Immunogen

Fusion protein amino acids 219-655 of rat Brevican

# **Purification**Protein G Purified

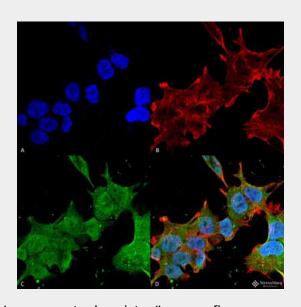
Storage -20°C

**Storage Buffer** PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Blue Ice or 4°C Temperature

**Certificate of Analysis** 

 $1~\mu g/ml$  of SMC-428 was sufficient for detection of Brevican in 20  $\mu g$  of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Brevican Monoclonal Antibody, Clone S294A-6 (ASM10262). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Brevican Monoclonal Antibody (ASM10262) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cell Membrane, Nucleus. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Brevican Antibody (D) Composite.

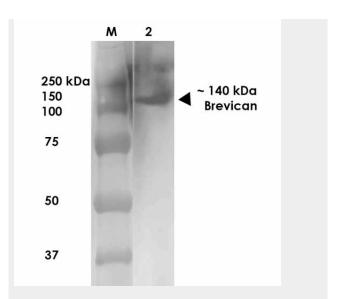


# **Cellular Localization**Extracellular Space | Extracellular Matrix | Membrane | Lipid-Anchor | GPI-Anchor

### **Brevican Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture



Western Blot analysis of Rat Brain Membrane showing detection of  $\sim \! 140 \text{ kDa}$  Brevican protein using Mouse Anti-Brevican Monoclonal Antibody, Clone S294A-6 (ASM10262). Lane 1: MW Ladder. Lane 2: Rat Brain Membrane (10 µg). . Load: 10 µg. Block: 5% milk. Primary Antibody: Mouse Anti-Brevican Monoclonal Antibody (ASM10262) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: TMB solution for 10 min at RT. Predicted/Observed Size:  $\sim \! 140 \text{ kDa}$ .

### **Brevican Antibody - Background**

Brevican is the most abundant chondroitin sulfate proteoglycan in the extracellular matrix of the adult brain. It is a member of the lectican family of aggregating extracellular matrix proteoglycans that bear chondroitin sulfate (CS) chains. It is highly expressed in the central nervous system and is thought to stabilize synapses and inhibit neural plasticity. Brevican is secreted from astrocytes and neurons as a 145 kD core protein that bears up to three, covalently-linked, CS chains. It is also is secreted as a 145 kD core protein without CS chains. When cleaved by extracellular glutamyl endopeptidases, the ADAMTSs, a 55 kD N-terminal fragment is formed that contains the unique C terminal epitope EAMESE.

### **Brevican Antibody - References**

1. Yamada H., Watanabe K., Shimonaka M. and Yamaguchi Y. (1994) J. Biol. Chem. 269:





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- 2. Yamada H., Watanabe K., Shimonaka M., Yamasaki M. and Yamaguchi Y. (1995) Biochem. Biophys. Res. Commun. 216: 957-963.
- 3. Rauch U., et al. (1997) Genomics 44: 15-21.
- 4. Zhang H., Kelly G., Zerillo C., Jaworski D.M. and Hockfield S. (1998) J. Neurosci. 7: 2370-2376.
- 5. Aspberg A., Adam S., Kostka G., Timpl R. and Heinegard D. (1999) J. Biol. Chem. 274: 20444-20449.