**Human/Mouse/Rat IGSF4C/SynCAM4 Antibody**
Monoclonal Mouse IgG, Clone # 937109
Catalog Number: MAB41642

### DESCRIPTION

**Species Reactivity**
Human/Mouse/Rat

**Specificity**
Detects human IGSF4C/SynCAM4 in direct ELISAs. Detects human, mouse, and rat IGSF4C/SynCAM4 in Western blots.

**Source**
Monoclonal Mouse IgG, Clone # 937109

**Purification**
Protein A or G purified from hybridoma culture supernatant

**Immunogen**
Mouse myeloma cell line NS0-derived recombinant human IGSF4C/SynCAM4

Gln25-Tyr323

Accession # Q8NFZ8

**Formulation**
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

### APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
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<th>Recommended Concentration</th>
<th>Sample</th>
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<td>Western Blot</td>
<td>2 μg/mL</td>
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### DATA

**Western Blot**

Detection of Human, Mouse, and Rat IGSF4C/SynCAM4 by Western Blot.

Western blot shows lysates of human cerebellum tissue, mouse cerebellum tissue, and rat cerebellum tissue. PVDF membrane was probed with 2 μg/mL of Mouse Anti-Human/Mouse/Rat IGSF4C/SynCAM4 Monoclonal Antibody (Catalog # MAB41642) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for IGSF4C/SynCAM4 at approximately 55-60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### PREPARATION AND STORAGE

**Reconstitution**
Reconstitute at 0.5 mg/mL in sterile PBS.

**Shipping**
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

**Stability & Storage**
Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.
IGSF4C is an immunoglobulin superfamily member that is also known as Nectin-like protein 4 (Necl-4), synaptic cell adhesion molecule 4 (SynCAM4), or tumor suppressor in lung cancer-like 2 (TSLL-2) (1, 2). The four IGSF4 proteins, designated A, B, C and D, are type I transmembrane glycoproteins expressed mainly in neurons, but also in lung, kidney, bladder, prostate and testis (1-5). Their extracellular domains (ECD) share 35-50% amino acid (aa) identity and each contain one V-type Ig-like and two C2-type Ig-like domains. These domains are responsible for Ca**+ independent homophilic and heterophilic interactions. The 388 aa human IGSF4C contains a 20 aa signal sequence, a 304 aa ECD that shares 98-99% amino acid identity with mouse, rat, canine and bovine IGSF4C, a 21 aa transmembrane sequence, and a 43 aa cytoplasmic domain. The apparent size of mouse or human IGSF4C may be variably reported as 48-67 kDa, probably due to differences in glycosylation (2, 5, 8). In the peripheral nervous system, IGSF4C is expressed on Schwann cells, and its internodal interaction with IGSF4A (Necl-1, SynCAM-3) on axons is critical for adhesion and myelination (6-8). In the brain, all IGSF4 family members are expressed at high levels concurrent with synapse formation (4). In the cerebellum, IGSF4C is expressed on Purkinje cells, with complementary expression of IGSF4 on granule cells (4). Heterophilic interaction with IGSF4D (Necl-3, SynCAM2) has also been identified, but homophilic interaction is unlikely (4, 6). IGSF4C is also proposed as a tumor suppressor that is downregulated in many prostate cancers and gliomas (1, 5).

References: