

#### DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse IGSF9B in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 993107
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse IGSF9B Arg21-Leu730 Accession # Q05BQ1
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

#### 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	HEK293 Human Cell Line Transfected with Mouse IGSF9 and eGFP

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

#### BACKGROUND

IGSF9, also known as Dasm1, is an approximately 130 kDa transmembrane protein that plays a role in neuronal synapse maintenance and function (1). Mature mouse Dasm1 consists of a 714 amino acid (aa) extracellular domain (ECD) with 5 Ig-like domains and 2 fibronectin type-3 domains, a 21 aa transmembrane segment, and a 424 aa cytoplasmic domain (2). Within the ECD, mouse Dasm1 shares 90% and 96% aa sequence identity with human and rat Dasm1, respectively. Alternative splicing generates an additional isoform that is truncated following the fifth Ig-like domain. Dasm1 is expressed in the dorsal root and trigeminal ganglia, forebrain, cortex, dentate gyrus, pyramidal cells, Purkinje cells, and hippocampal CA1 interneurons (2-5). It localizes to dendrites, cell bodies, and post-synaptic densities (3, 6). Dasm1 functions as a homophilic adhesion protein that supports the maintenance of inhibitory synapses as well as inhibitory neurotransmission (5, 6).

#### References:

1. Hansen, M. and P.S. Walmod (2013) *Neurochem. Res.* **38**:1236.
2. Doudney, K. *et al.* (2002) *Genomics* **79**:663.
3. Shi, S.-H. *et al.* (2004) *Proc. Natl. Acad. Sci. USA* **101**:13341.
4. Mishra, A. *et al.* (2008) *Mol. Cell. Biol.* **28**:2782.
5. Mishra, A. *et al.* (2014) *J. Neurosci.* **34**:4187.
6. Shi, S.-H. *et al.* (2004) *Proc. Natl. Acad. Sci. USA* **101**:13346.

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