

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IGSF9B in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 993107
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IGSF9B Arg21-Leu730 Accession # Q05BQ1
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	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.

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

PREPARATION AND STORAGE

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

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:

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

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