

DESCRIPTION

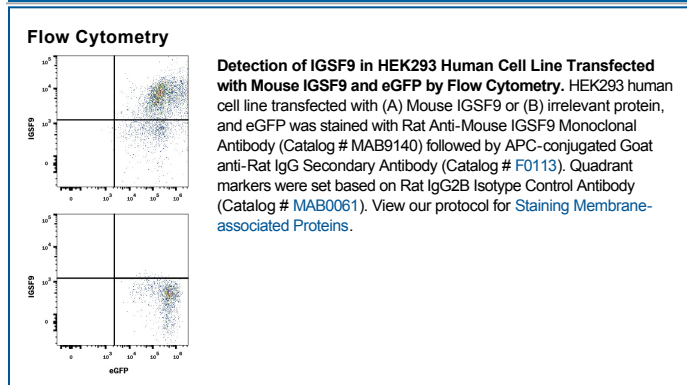
Species Reactivity	Mouse
Specificity	Detects mouse IGSF9B in direct ELISAs.
Source	Monoclonal Rat IgG _{2B} Clone # 993107
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IGSF9B Arg21-Leu730 Accession # Q05BQ1
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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.

	Recommended Concentration	Sample
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



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. <ul style="list-style-type: none"> ● 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.

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.