

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IGSF8/CD316 in direct ELISAs.
<b>Source</b>	Recombinant Monoclonal Rabbit IgG Clone # 2587A
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	Human embryonic kidney cell, HEK293-derived human IGSF8/CD316 protein Arg28-Thr579 Accession # Q969P0
<b>Conjugate</b>	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide.  *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	SHSY-5Y human neuroblastoma cell line

## 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

IGSF8 (Immunoglobulin superfamily member 8), also known as EWI-2, KCT-4, LIR-D1, and PGRL, is a 75-kDa cell surface protein belonging to the immunoglobulin superfamily (1). IGSF8 is widely expressed, with pronounced mRNA expression in the brain and protein expression on peripheral blood lymphocytes and hepatocytes where it colocalizes with CD81 (1-3). It strongly associates with tetraspanins CD9 and CD81 which may act as physical linkers to form a complex with α3β1 integrin that may regulate cell aggregation and motility on laminin-5 (4). Human IGSF8 is synthesized as a 613 aa protein that includes a 27 aa signal peptide, a 552 aa extracellular domain (ECD), a 21 aa transmembrane segment, and a 13 aa cytoplasmic tail. Within the ECD, human IGSF8 shares 91% and 90% aa sequence identity with mouse and rat IGSF8, respectively. IGSF8 is an inducible receptor for Heat Shock Protein A8 (HSPA8) on activated dendritic cells (5). IGSF8 can interact with α-Actinin to regulate T cell immune synapses and HIV viral infection (6). In human glioma patients, low IGSF8 expression correlates with shorter survival time. Studies have shown that re-expression of IGSF8 in malignant glioblastoma cell lines inhibited glioblastoma colony formation in soft agar and caused diminished cell motility and invasion (7).

### References:

1. Clark, K.L. *et al.* (2001) J. Immunol. **167**:5115.
2. Stipp, C.S. *et al.* (2001) J. Biol. Chem. **276**:40545.
3. Charrin, S. *et al.* (2003) Biochem. J. **373**:409.
4. Stipp, C.S. *et al.* (2003) J. Cell Biol. **163**:1167.
5. Kettner, S. *et al.* (2007) Mol Cell Biol. **27**:7718.
6. Gordón-Alonso, M. *et al.* (2012) J Immunol **189**:689.
7. Kolesnikova, T. *et al.* (2009) Neoplasia **11**:77.

## PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.