

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human DC-SIGNR/CD299.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 120604
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NIH-3T3 mouse embryonic fibroblast cell line transfected with human DC-SIGNR/CD299 Accession # Q9H2X3
<b>Conjugate</b>	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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	Human DC-SIGNR/CD299 transfected 3T3 mouse embryonic fibroblast 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

Dendritic cell-specific ICAM-3 grabbing non-integrin (DC-SIGN or CD299) and DC-SIGN related protein (DC-SIGNR, DC-SIGN2, L-SIGN or CD209L) are type II membrane proteins that are mannose-specific calcium-dependent (C-type) lectins. The two proteins share 77% amino acid identity. DC-SIGN mediates interactions between dendritic cells (DCs) and T cells. Both DC-SIGN and DC-SIGNR have been shown to bind HIV, hepatitis C glycoproteins, Ebola virus glycoproteins and the cellular adhesion protein ICAM-3 (1-4). DC-SIGN and DC-SIGNR appear to selectively recognize and bind viral proteins containing a large portion of high-mannose oligosaccharides (5). Though DC-SIGN and DC-SIGNR are found on the same chromosome, they are not expressed in the same tissue. DC-SIGN is expressed solely on Dendritic cells while DC-SIGNR is found on endothelial cells in the liver and lymph node sinuses and in a significant portion of capillary endothelial cells in term placenta (1, 4).

#### References:

1. Pohlmann, S. *et al.* (2001) *Proc. Natl. Acad. Sci. USA* **98**:2670.
2. Pohlmann, S. *et al.* (2003) *J. Virol.* **77**:4070.
3. Simmons, L.G. *et al.* (2003) *J. Virol.* **77**:1337.
4. Bahirova, A.A. *et al.* (2001) *J. Exp. Med.* **193**:671.
5. Feinberg, H. *et al.* (2001) *Science* **294**:2163.

#### 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.