

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CLEC17A in direct ELISA.
Source	Monoclonal Mouse IgG ₁ Clone # 1064719
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	CHO-derived human CLEC17A Lys194-Cys378 Accession # Q6ZS10
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	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.

Flow Cytometry	Titration recommended for optimal concentration with starting range of 0.1-1 µg/1 million cells. Sample used for this experiment was HEK293 cells transfected with Human CLEC17A and eGFP vs irrelevant.
-----------------------	--

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. 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

C-type lectin domain family 17, member A (CLEC17A), also known as Prolectin, is type II transmembrane protein that is expressed mainly on dividing B cells found in the germinal centers of secondary lymphoid organs, including lymph nodes, tonsils, stomach, intestine, appendix and spleen (1, 2). CLEC17A binds preferentially to epithelial rather than to mesenchymal cells, and it behaves as a cell adhesion molecule for epithelial cells (2). It has high specificity towards mannose and was found to form disulfide-linked oligomers (1, 3). Human CLEC17A is synthesized as a 378 amino acid (aa) protein that includes a 172 aa cytoplasmic domain, a 21 aa transmembrane segment, and a 185 aa extracellular domain (ECD). Within the ECD, human CLEC17A shares 84% aa sequence identity with canine CLEC17A. C-type lectins are Ca²⁺-depending sugar-binding proteins that are involved in several immune-related and other physiological functions. Presently, 17 groups within the C-type lectin superfamily have been recognized (4), with more C-type lectins being constantly discovered based on the presence of a conserved 115-130 amino acid domain along their sequences - the C-type carbohydrate recognition domain (CRD). However, for most of the recently identified C-type lectins, their interactions with carbohydrates, intracellular functions and molecular mechanisms still remain unclear (3).

References:

1. Graham, S.A. *et al.* (2009) J. Biol. Chem. **284**:18537.
2. Breiman, A. *et al.* (2016) Oncotarget **7**:14064.
3. Koh, G. *et al.* (2011) BMC Bioinformatics **12**:S5.
4. Zelensky, A.N. *et al.* (2005) FEBS Journal **272**:6179.

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.