

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD58/LFA-3 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CD58/LFA-3 Phe29-Arg215 Accession # P19256
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% 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.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

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

T cells require a signal induced by the engagement of the T cell receptor and a "co-stimulatory" signal(s) through distinct T cell surface molecules for optimal T cell expansion and activation. Many cell-bound receptor-ligand pairs have now been shown to be involved in T cell co-stimulation including CD58/CD2 in humans and CD48/CD2 in mice and rats. CD58, also known as lymphocyte function-associated antigen (LFA-3), is a 210 amino acid protein that belongs to the CD2 family of the immunoglobulin superfamily (1). CD58 is widely expressed on hematopoietic and non-hematopoietic human tissue and has been found on leukocytes, erythrocytes, endothelial cells, epithelial cells and fibroblasts of human origin (2). No mouse or rat homolog of CD58 has as of yet been identified. CD58 has only one known ligand, CD2. CD2 is expressed on T cells, NK cells and dendritic cells (2-4). CD2 ligation by CD58 has been shown to mediate T cell adhesion, T cell activation, T cell cytokine production, and T cell and NK cells cytotoxic activity (1, 3, 5, 6). In dendritic cells, CD2 engagement increases MHC Class II, CD40, CD80, CD86, CD58, and CCR7 and induces IL-1β and IL-12 cytokine secretion (4).

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.