

DESCRIPTION

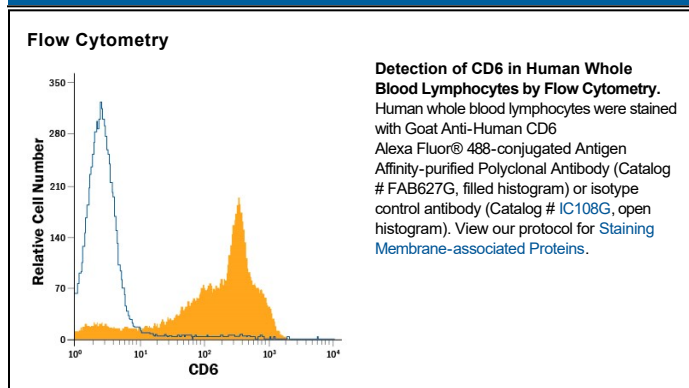
Species Reactivity	Human
Specificity	Detects recombinant human CD6 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CD6 His18-Glu398 Accession # Q8WWJ7
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 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.

	Recommended Concentration	Sample
Flow Cytometry	5 µL/10 ⁶ cells	See Below

DATA



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

Human CD6 is a 105 kDa (unphosphorylated) -130 kDa (hyperphosphorylated) glycoprotein Group B member of the SRCR (Scavenger Receptor Cys-Rich) superfamily of molecules. It has a restricted expression pattern, being limited to select CD56^{dim} NK cells, B1a B cells (IgM producers), thymocytes and virtually all resting T cells. Mature CD6 is a type I transmembrane protein 651 amino acids (aa) in length. It contains a 385 aa extracellular region (aa 19-402) that possesses three SRCR repeats, and a relatively long 245 aa cytoplasmic domain. There are at least six alternative splice forms for human CD6, four of which (plus the full-length form) contain an unspliced extracellular region. The isoform used here for immunization (SwissProt: Q8WWJ7) is one of these four, showing splicing only in the cytoplasmic region. Thus, the polyclonal antibody used here will recognize all full-length CD6 molecules, and may, by an absence of staining, suggest the presence of the two isoform variants that are missing the third SRCR repeat that lies between aa 259-361. CD6 has multiple interaction partners. It complexes with CD5 *in cis*, contributing to the immunological synapse; *in trans*, it binds to dendritic cell CD166/ALCAM on the surface of adjacent cells. CD6 is also known to bind soluble galectin-1 and -3, and to bind the PAMPs associated with pathogenic microbes. Notably, on T cells and following activation, full-length CD6 is downregulated, and a splice variant lacking the third SRCR is upregulated, abrogating any CD6:CD166 interaction. Functions attributed to CD6 include the induction of chemokine secretion by NK cells, costimulation of antigen recognition by T cells, and an antimicrobial activity attributed to an 85 kDa soluble form of CD6. Over aa 18-398, human and mouse CD6 share 68% aa sequence identity.

Human CD6 Alexa Fluor® 488-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: FAB627G
100 Tests

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.