Mouse CD4 Alexa Fluor® 700-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF554N
100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CD4 in direct ELISAs and Western blots. In these formats, less than 1% cross-reactivity with recombinant human CD4, recombinant feline CD4, and recombinant canine CD4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CD4 Lys27-Thr394 Accession # P06332
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.*

Western Blot	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

CD4 (Cluster of Differentiation #4; also L3T4) is a 55 kDa member of the Ig Superfamily of molecules. It is expressed on a variety of hematopoietic cell types, including immature thymocytes, a number of variable phenotype single positive T cells (i.e.- CD25+; CD39+; Th1, 2 and 17 type cells), stimulated CD8+ T cells, pluripotent bone marrow stem cells, and NKT cells. Although CD4 is a standard phenotype marker, functionally, the molecule is known to bind to APC MHC class II, and to associate with adjacent CD3 molecules to link $p56^{lck}$ with the lymphocyte TCR:CD3 complex. Mature mouse CD4 is a 431 amino acid (aa) type I transmembrane glycoprotein. It contains a 368 aa extracellular region (aa 27-394) plus a 40 aa cytoplasmic domain (aa 418-457). The extracellular region contains one V-type (aa 27-128) and three C2-type Ig-like domains (aa 129-374). There is one alternative start site at Met241 that is utilized in brain. Over aa 27-394, mouse CD4 shares 53% and 72% aa identity with human and rat CD4, respectively.

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.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475