

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 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.

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