

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | 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.                                                                           |
| <b>Source</b>             | Polyclonal Goat IgG                                                                                                                                                                                                                                                         |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse CD4<br>Lys27-Thr394<br>Accession # P06332                                                                                                                                                                             |
| <b>Conjugate</b>          | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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<sup>lck</sup> 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

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