

#### 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 Lys27-Thr394 Accession # P06332
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

#### 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse CD4

#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### 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.