Mouse CD45 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF114

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CD45 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 5% cross-reactivity with recombinant human CD45 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CD45 Gln24-Lys425 Accession # NP_035340
Formulation	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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse CD45 (Catalog # 114-CD)
Flow Cytometry	2.5 µg/10^6 cells	Mouse splenocytes
Immunocytochemistry	5-15 µg/mL	Immersion fixed mouse splenocytes

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Mouse CD45 (also known as Ly5 and leukocyte common antigen) is a 180-220 kDa variably glycosylated member of the class 1 subtype of the protein tyrosine phosphatase family. It is synthesized as a 1291 amino acid (aa) precursor that contains a 23 aa signal sequence, a 541 aa extracellular domain (ECD), a 22 aa transmembrane segment, and a 705 aa cytoplasmic region. The ECD is coded for by exons 4-16 of the CD45 gene. Alternate splicing of exon 4 (or A) (aa 30-74), exon 5 (or B) (aa 75-123) and exon 6 (or C) (aa 124-169) define different lymphocyte populations and functional stages. Naïve T cells express exon 5 (CD45 RB), while activated T cells express neither exon 4, 5 or 6 (CD 45 RO). B cells express CD45 RABC, while resting NK cells express CD45 RA. Mouse CD45 ECD shares 60% and 44% aa sequence identity with rat and human full-length CD45 ECD, respectively.