

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse CD45 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse CD45 Gln24-Lys425 Accession # NP_035340
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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.

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	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

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 (CD45 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.

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