CD-45 Antibody (CT)

ALTERNATE NAMES: PTPRC; CD45; Receptor-type tyrosine-protein phosphatase C; Leukocyte common antigen; T200; Flags: Precursor.

CATALOG #: 6734-100

AMOUNT: 100 µl

HOST/ISOTYPE: Rabbit IgG

IMMUNOGEN: This CD45 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1245-1275 amino acids from the C-terminal region of human CD45.

PURIFICATION: This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

MOLECULAR WEIGHT: ~40.07 kDa

FORM: Liquid

FORMULATION: Supplied in PBS with 0.09% (W/V) sodium azide.

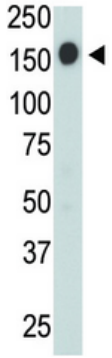
SPECIES REACTIVITY: Human.

STORAGE CONDITIONS: Maintain refrigerated at 2-8°C for up to 6 months. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

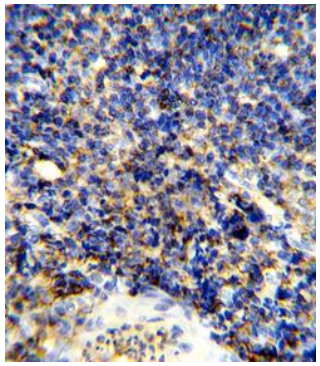
DESCRIPTION: CD45 has been identified as a transmembrane glycoprotein, broadly expressed among hematopoietic cells. Multiple isoforms of CD45 are distributed throughout the immune system according to cell type. These isoforms arise because of alternative splicing of exons 4, 5 and 6. The corresponding protein domains are characterized by the binding of monoclonal antibodies specific for CD45RA (exon 4), CD45RB (exon 5), CD45RC (exon 6) and CD45RO (exons 4 to 6 spliced out). The variation in these isoforms is localized to the extracellular domain of CD45, while the intracellular domain is conserved. CD45 functions as a phosphotyrosine phosphatase, a vital component for efficient tyrosine phosphorylation induction by the TCR/CD3 complex. The tyrosine phosphatase activity of CD45 is contained within the conserved intracellular domain. Src and Syk family protein tyrosine kinases are utilized by the TCR/CD3 complex to initiate signaling cascades. Several members of these two families, including Lck, Fyn and ZAP-70, have been implicated as physiological substrates of CD45.

APPLICATION: Western blot: ~1:1000, IHC: ~1:10–1:50, FACS: ~1:10-1:50.

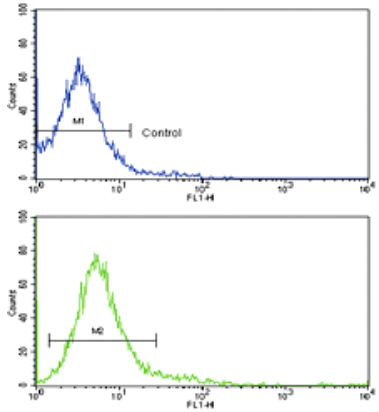
Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.



The anti-CD45 (C-term) pAb (Cat # 6734) is used in Western blot to detect CD45 in Jurkat cell lysate.



Formalin-fixed and paraffin-embedded human tonsil tissue reacted with CD45 antibody (CT) (Cat # 6734), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.



FACS analysis of Jurkat cells using CD45 Antibody (C-term) (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

RELATED PRODUCTS:

- CD-14 Antibody (CT) **(Cat # 6732-100)**
- CD-14 Antibody (NT) **(Cat # 6733-100)**
- CD-14 Antibody (Clone biG 10) **(Cat # 3676-100)**
- CD-14, human recombinant **(Cat # 4937-10)**
- CD-14, mouse recombinant **(Cat # 4938-10)**
- Human CellExp™ sCD14, Human Recombinant **(Cat # 7122-10, -50)**