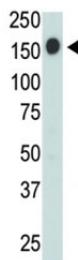


## CD45 Antibody (F44586)

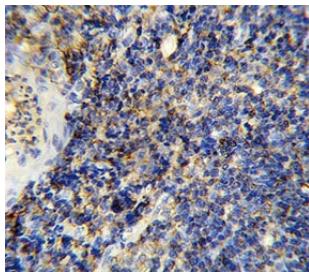
Catalog No.	Formulation	Size
F44586-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F44586-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

**Bulk quote request**

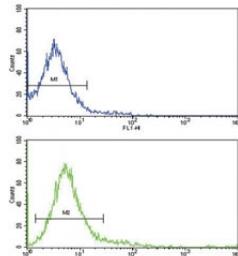
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit Ig
<b>Purity</b>	Purified
<b>UniProt</b>	P08575
<b>Localization</b>	Cytoplasmic, membrane
<b>Applications</b>	Western Blot : 1:1000 IHC (Paraffin) : 1:10-1:50 Flow Cytometry : 1:10-1:50
<b>Limitations</b>	This CD45 antibody is available for research use only.



CD45 antibody used in western blot to detect CD45 in Jurkat cell lysate. Expected molecular weight: ~147/180-220 kDa (unmodified/glycosylated).



IHC analysis of FFPE human tonsil stained with CD45 antibody



Flow cytometric analysis of Jurkat cells using CD45 antibody (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary Ab was used for the analysis.

## Description

CD45 is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus belongs to receptor type PTP. The CD45 gene is specifically expressed in hematopoietic cells. This PTP has been shown to be an essential regulator of T- and B-cell antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor complexes, or by activating various Src family kinases required for the antigen receptor signaling. This PTP also suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling.

## Application Notes

Titration of the CD45 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

## Immunogen

A portion of amino acids 1245-1275 from the human protein was used as the immunogen for this CD45 antibody.

## Storage

Aliquot the CD45 antibody and store frozen at -20°C or colder. Avoid repeated freeze-thaw cycles.