

## Product Datasheet

### Anti-CD45/PTPRC Antibody (orb334517)

<b>Catalog Number</b>	orb334517
<b>Description</b>	Anti-CD45/PTPRC Antibody
<b>Species/Host</b>	Rabbit
<b>Reactivity</b>	Human
<b>Conjugation</b>	Unconjugated
<b>Tested Applications</b>	FC, IF, IHC, WB
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the C-terminus of human CD45, different from the related mouse sequence by eight amino acids, and from the related rat sequence by ten amino acids.
<b>Form/Appearance</b>	Lyophilized
<b>Concentration</b>	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Note</b>	For research use only
<b>Application notes</b>	Western blot, 0.1-0.5µg/ml, Human Immunohistochemistry (Paraffin-embedded Section), 2-5µg/ml, Human Immunofluorescence, 5µg/ml, Human Flow Cytometry(Fixed), 1-3µg/1x10 <sup>6</sup> cells, Human. Add 0.2ml of distilled water will yield a concentration of 500ug/ml
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Polyclonal
<b>Antibody Type</b>	Primary Antibody
<b>MW</b>	220 kDa

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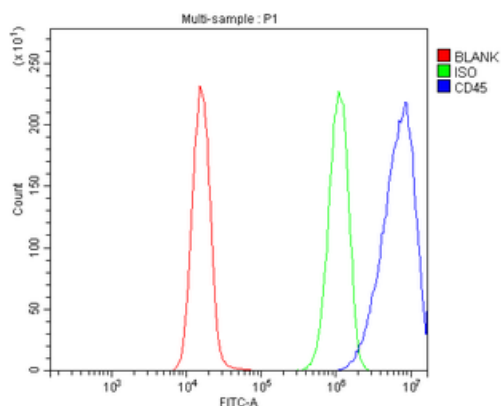
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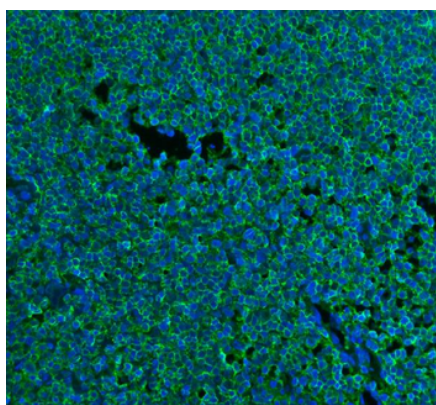
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**Uniprot ID****P08575****Expiration Date**

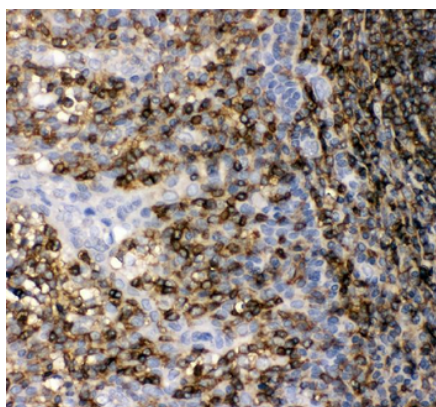
12 months from date of receipt.



Flow Cytometry analysis of Jurkat cells using anti-CD45 antibody. Overlay histogram showing Jurkat cells (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-CD45 Antibody (1  $\mu\text{g}/1 \times 10^6$  cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (5-10  $\mu\text{g}/1 \times 10^6$  cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1  $\mu\text{g}/1 \times 10^6$ ) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IF analysis of CD45 using anti-CD45 antibody. CD45 was detected in a paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 5  $\mu\text{g}/\text{mL}$  rabbit anti-CD45 Antibody overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



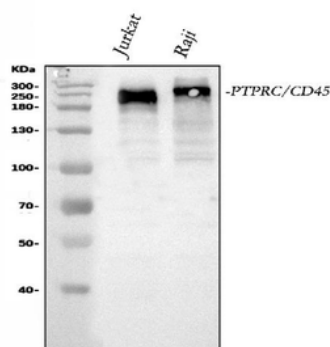
IHC analysis of CD45 using anti-CD45 antibody. CD45 was detected in a paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2  $\mu\text{g}/\text{ml}$  rabbit anti-CD45 Antibody overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.

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Western blot analysis of CD45 using anti-CD45 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Jurkat whole cell lysates, Lane 2: human Raji whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CD45 antigen affinity purified polyclonal antibody at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for CD45 at approximately 180-250 kDa. The expected band size for CD45 is at 147 kDa.

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