

## Anti-PTPRC / CD45 Reference Antibody (Novartis patent anti-CD45)

Recombinant Antibody Catalog # APR10026

#### **Specification**

### Anti-PTPRC / CD45 Reference Antibody (Novartis patent anti-CD45) - Product Information

Application FC, Kinetics, Animal Model

Primary Accession
Reactivity
Human
Clonality
Monoclonal
Isotype
IgG1
Calculated MW
150 KDa

# Anti-PTPRC / CD45 Reference Antibody (Novartis patent anti-CD45) - Additional Information

Target/Specificity PTPRC / CD45

**Endotoxin** 

< 0.001EU/ µg,determined by LAL method.

**Conjugation** Unconjugated

**Expression system** 

CHO Cell

#### **Format**

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

#### Anti-PTPRC / CD45 Reference Antibody (Novartis patent anti-CD45) - Protein Information

Name PTPRC (HGNC:9666)

**Synonyms** CD45

#### **Function**

Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor (PubMed:<a href="http://www.uniprot.org/citations/35767951" target="\_blank">35767951</a>). Acts as a positive regulator of T-cell coactivation upon binding to DPP4. The first PTPase domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first one. Upon T-cell activation, recruits and dephosphorylates SKAP1 and FYN. Dephosphorylates LYN, and thereby modulates LYN activity (By similarity). Interacts with CLEC10A at antigen presenting cell-T cell contact; CLEC10A on immature dendritic cells recognizes Tn antigen- carrying PTPRC/CD45 receptor on effector T cells and modulates T cell activation threshold to limit autoreactivity.



#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Membrane raft. Synapse. Note=Colocalized with DPP4 in membrane rafts.

#### **Tissue Location**

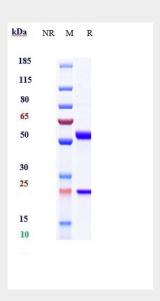
Isoform 1: Detected in thymocytes. Isoform 2: Detected in thymocytes. Isoform 3: Detected in thymocytes. Isoform 4: Not detected in thymocytes. Isoform 5: Detected in thymocytes. Isoform 6: Not detected in thymocytes. Isoform 7: Detected in thymocytes Isoform 8: Not detected in thymocytes.

#### Anti-PTPRC / CD45 Reference Antibody (Novartis patent anti-CD45) - Protocols

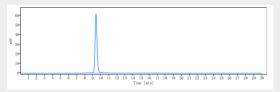
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### Anti-PTPRC / CD45 Reference Antibody (Novartis patent anti-CD45) - Images

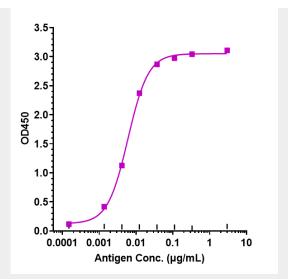


Anti-PTPRC / CD45 Reference Antibody (Novartis patent anti-CD45) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%



The purity of Anti-PTPRC / CD45 Reference Antibody (Novartis patent anti-CD45)is more than 95% , determined by SEC-HPLC.





Immobilized human IL-18 His at4  $\mu$ g/mL can bind Anti-PTPRC / CD45 Reference Antibody (Novartis patent anti-CD45) $\square$ EC50=0.00604  $\mu$ g/mL.