

## Product datasheet for AM33266PU-S

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### CD45 (PTPRC) Mouse Monoclonal Antibody [Clone ID: SPM570]

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: SPM570

**Applications:** FC, IF, IHC, IP, WB

**Recommended Dilution: ELISA:** Use BSA free Antibody for Coating.

Western Blot: 0.5-1 µg/ml.

**Immunoprecipitation:** 0.5-1 μg/500 μg protein lysate.

**Flow Cytometry:** 0.5-1 μg/106 cells. **Immunofluorescence:** 0.5-1 μg/ml.

Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections: 0.5-1 µg/ml for

30 minutes at RT.

Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH

6.0, for 10-20 min followed by cooling at RT for 20 minutes.

Positive Control: Ramos, U-698, or GA-10 cells, Tonsil.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Isolated neoplastic cells from T cell lymphoma.

**Specificity:** This Monoclonal *SPM570* antibody recognizes Human CD45. Other species not tested.

Antibody to CD45 is useful in differential diagnosis of lymphoid tumors from non-

hematopoietic undifferentiated neoplasms.

**Cellular Localization:** Cell surface and cytoplasmic.

Formulation: 10mM PBS

State: Purified

State: Liquid purified IgG fraction from Bioreactor Concentrate

Stabilizer: 0.05% BSA

Preservative: 0.05% Sodium Azide

**Concentration:** lot specific

**Purification:** Protein A/G Chromatography





#### CD45 (PTPRC) Mouse Monoclonal Antibody [Clone ID: SPM570] - AM33266PU-S

Conjugation: Unconjugated

**Storage:** Store undiluted at 2-8°C.

**Stability:** Shelf life: one year from despatch.

Predicted Protein Size: 180-220 kDa

**Gene Name:** protein tyrosine phosphatase, receptor type C

Database Link: Entrez Gene 5788 Human

P08575

Background: CD45, a transmembrane multifunctional glycoprotein, is a member of the Type I receptor-

linked PTPase family. Its physiological functions include T and Bcell activation and proliferation, negative regulation of T and Bcell antigen receptor signaling and cytokine-receptor signaling, negative regulation of IL-3 mediated cellular proliferation, EPO-dependant homeopoiesis and anti-viral responses, regulation of integrin-mediated adhesion and migration of immune cells, chemokine-induced T-cell chemotaxis, MHC-II signaling, IgE mediated degranulation in mast cells, CD40L-induced microglial activation and IL-4 mediated

IgE class switch recombination in Bcells. Loss of CD45 has been implicated in SCID,

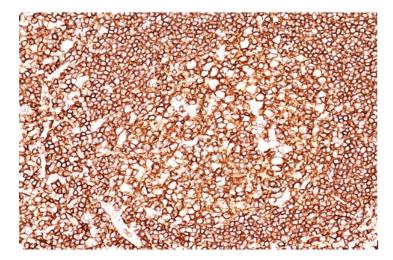
Alzheimer's disease and multiple sclerosis.

CD45R, also designated CD45 and PTPRC, has been identified as a transmembrane glycoprotein, broadly expressed among hematopoietic cells. Multiple isoforms of CD45R 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 CD45R, while the intracellular domain is conserved. CD45R functions as a phosphor-tyrosine phosphatase.

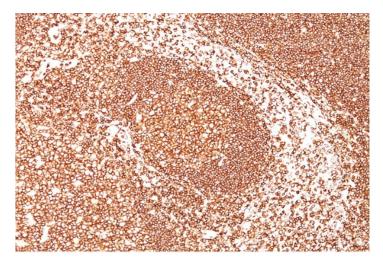
Synonyms: PTPRC, Leukocyte common antigen, L-CA, T200



# **Product images:**



Formalin-Fixed, Paraffin-Embedded Human tonsil (20X) stained with CD45 Antibody (Clone SPM570).



Formalin-Fixed, Paraffin-Embedded Human tonsil (10X) stained with CD45 Antibody (Clone SPM570).