# **PRODUCT INFORMATION**

Catalog number ACD0802

**Clone No.** 3G4

Product type Monoclonal Antibody

UnitProt No. P08575

NCBI Accession No. NM\_002838

#### **Alternative Names**

protein tyrosine phosphatase, receptor type, C (PTPRC), CD45, B220, CD 45, CD45 antigen, GP180, L CA, LCA, Leukocyte common antigen, LY5, Protein tyrosine phosphatase receptor type C, Protein tyrosine phosphatase receptor type c polypeptide, PTPRC, SCID due to PTPRC deficiency, T200, T200 glycoprotein,

## **PRODUCT SPECIFICATION**

**Antibody Host** 

Mouse

**Reacts With** Human

Concentration 1mg/ml (determined by BCA assay)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

#### Immunogen

Recombinant human CD45 (1029-1249aa) purified from E. coli

#### Isotype

IgG2a kappa

## **Purification Note**

By protein-G affinity chromatography

## Application

ELISA, FACS

### Usage

The antibody has been tested by ELISA and Flow cytometry to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.



#### Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

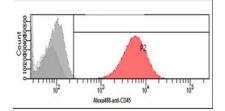
CD45 belongs to a family of heavily glycosylated, high molecular weight transmembrane glycoproteins expressed on all cells of haematopoietic origin. Structurally heterogeneous, CD45 consists of a family of eight isoforms ranging from 180, 000 to 220, 000 MW generated by alternative splicing of three exons differentially expressed on subpopulation of lymphocytes. CD45 protein tyrosine phosphatase activity plays a central role in Tcell activation. CD45 plays an important role in signal transduction inhibition or upregulation of various immunological functions,

#### **General References**

Evgueni K , et al., (2005) Immunogenetics 57(5):374-383 Holmes N., (2006) Immunology 117(2):145-155 Francois S , et al., (2004) Immunology 113(4):441-452 Tara S , et al., (2003) Proc Natl Acad Sci U S A 100(10):5997-6002

### DATA

### Flow cytometry (FACS)



Flow cytometry analysis of CD45 in Jurkat cells. The cell was stained with ACD0802 at 2-5ug for 1x106cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).