

# Product datasheet

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# ARG23435 anti-CD45 antibody [1.11.32] (PE)

Package: 50 tests Store at: 4°C

#### **Summary**

Product Description PE-conjugated Mouse Monoclonal antibody [1.11.32] recognizes CD45

Mouse anti Sheep CD45 antibody, clone 1.11.32 recognizes the ovine CD45 (Leucocyte common antigen), expressed on all ovine lymphocytes, macrophages and granulocytes. Mouse anti Sheep CD45 antibody, clone 1.11.32 immunoprecipitates CD45 molecules of 190 kDa, 210 kDa and 225 kDa from

lymph node lysates.

Tested Reactivity Bov, Goat, Sheep

Tested Application FACS

Host Mouse

Clonality Monoclonal

Clone 1.11.32

Isotype IgG1

Target Name CD45

Species Sheep

Immunogen Ovine efferent lymphatic duct lymphocytes.

Conjugation PE

Alternate Names LY5; GP180; Receptor-type tyrosine-protein phosphatase C; CD45; L-CA; CD antigen CD45; Leukocyte

common antigen; CD45R; LCA; T200; EC 3.1.3.48; B220

### **Application Instructions**

Application table	Application	Dilution
	FACS	Neat
Application Note	FACS: Use 10 $\mu$ l of the suggested working dilution to label 10^6 cells in 100 $\mu$ l.	

\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations

should be determined by the scientist.

## **Properties**

Form Liquid

Purification Purification with Protein G.

Buffer PBS, 0.09% Sodium azide, 1% BSA and 5% Sucrose.

Preservative 0.09% Sodium azide

Stabilizer 1% BSA and 5% Sucrose

Storage instruction Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid

repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be

gently mixed before use.

#### Bioinformation

Gene Symbol

**PTPRC** 

Gene Full Name

protein tyrosine phosphatase, receptor type, C

Background

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, mitosis, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus is classified as a receptor type PTP. 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. Alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported. [provided by RefSeq, Jun 2012]

**Function** 

CD45: Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor. 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.

(Microbial infection) Acts as a receptor for human cytomegalovirus protein UL11 and mediates binding of UL11 to T-cells, leading to reduced induction of tyrosine phosphorylation of multiple signaling proteins upon T-cell receptor stimulation and impaired T-cell proliferation. [UniProt]

Research Area

Developmental Biology antibody; Immune System antibody; Neuroscience antibody; Signaling Transduction antibody; Mouse Inflammatory Cell Marker antibody; B Cell Marker antibody

Calculated Mw

147 kDa

PTM

Heavily N- and O-glycosylated. [UniProt]