

VF500 Rat Anti-Mouse CD45

Purified VF500-conjugated Recombinant Rat Monoclonal Antibody

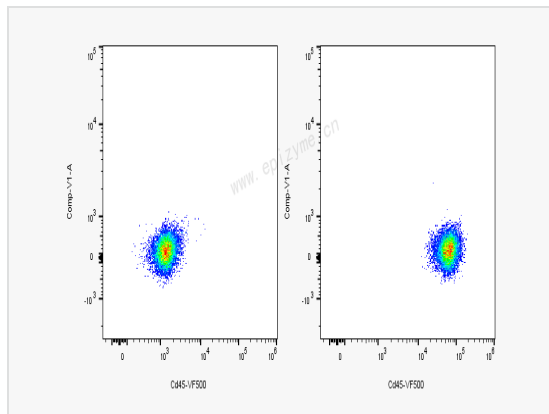
Catalog # F207803

Product Information

Application	FC
Recommended Usage	5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood.
Reactivity	Mouse
Host	Rat
Clonality	Monoclonal
Clone No.	82E44T40
Isotype	IgG2b, κ
Label	VF500 (Ex/Em: 410/501 nm)
Immunogen	Recombinant protein of mouse CD45
Format	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA.
Storage	Shipped on wet ice. Store undiluted between 2°C and 8°C and protected from prolonged exposure to light. Do not freeze.
Precautions	VF500 Rat Anti-Mouse CD45 [82E44T40] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	CD45; Ly-5; Ptpcr; Receptor-type tyrosine-protein phosphatase C; Leukocyte common antigen; Lymphocyte antigen 5; T200; L-CA.
Uniprot ID	P06800
Gene ID	19264
Background	Enables several functions, including heparan sulfate proteoglycan binding activity; heparin binding activity; and protein tyrosine phosphatase activity. Involved in several processes, including lymphocyte differentiation; regulation of cytokine production; and regulation of signal transduction. Acts upstream of or within several processes, including T cell activation; positive regulation of lymphocyte activation; and regulation of protein phosphorylation. Located in external side of plasma membrane; focal adhesion; and membrane raft. Is expressed in several structures, including alimentary system; cardiovascular system; hemolymphoid system; placenta; and skin. Used to study Alzheimer's disease and systemic lupus erythematosus. Human ortholog(s) of this gene implicated in multiple sclerosis; severe combined immunodeficiency; and severe combined immunodeficiency 105. Orthologous to human PTPRC (protein tyrosine phosphatase receptor type C). [provided by Alliance of Genome Resources, Jul 2025]
Cellular Location	Cell membrane; Single-pass type I membrane protein; Membrane raft, Synapse. Note: Colocalized with DPP4 in membrane rafts.
Tissue Location	Expression is restricted to the hematopoietic compartment of development.



Typical flow-cytometry plots of mouse C57BL/6J splenocytes stained with anti-CD45-VF500 (F207803) (right) compared to unstained control (left).