## For Research Use Only

## CD45.2 Recombinant antibody

Catalog Number:84637-1-RR



**Basic Information** 

Catalog Number: GenBank Acces 84637-1-RR GeneID (NCBI): Concentration: 19264

1000  $\,\mu$  g/ml Full Name: Source: protein tyrosine phosphatase, Rabbit receptor type, C

Observed MW:

200-220 kDa

Immunogen Catalog Number:

EG2467

Isotype:

GenBank Accession Number: Purification Method:

Protein A purfication CloneNo.:

CloneNo.: 241543F9

Recommended Dilutions: WB 1:1000-1:4000 IHC 1:1000-1:4000 IF-P 1:200-1:800 IF-Fro 1:200-1:800

**Applications** 

Tested Applications: WB, IHC, IF-P, IF-Fro, ELISA Species Specificity:

mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Positive Controls:** 

WB: mouse thymus tissue, mouse spleen tissue

IHC: mouse spleen tissue,
IF-P: mouse spleen tissue,
IF-Fro: mouse spleen tissue,

**Background Information** 

CD45, also known as protein tyrosine phosphatase, receptor type C, is a type I transmembrane protein expressed on the surface of all haematopoietic cells with the exception of erythrocytes and platelets (PMID: 3489673; 28615666). CD45 is a pan-haematopoietic cell marker and has been shown to be essential for T- and B-cell activation and signalling (PMID: 9429890; 16378097). Allelic variants of mouse CD45, CD45.1 (Ly5.1) and CD45.2 (Ly5.1), have been established as a marker system to track haematopoietic cells following congenic mouse bone marrow transplants (PMID: 28615666). CD45.2 is the common form and is expressed by most of the established strains, while CD45.1 is found in only a few like the SJL mouse strain (PMID: 3489673).

Storage

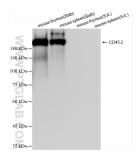
Storage:

Store at -20°C. Stable for one year after shipment. Storage Buffer:

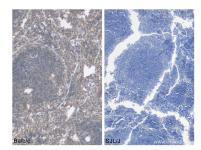
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  $\,$ 

Aliquoting is unnecessary for -20°C storage

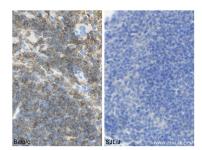
## **Selected Validation Data**



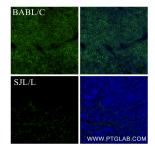
Various lysates were subjected to SDS PAGE followed by western blot with 84637-1-RR (CD45.2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



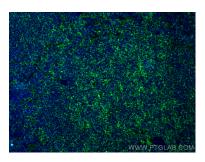
Immunohistochemical analysis of paraffinembedded mouse spleen tissue slide using 84637-1-RR (CD45.2 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



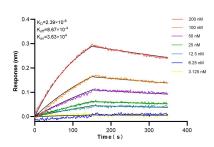
Immunohistochemical analysis of paraffinembedded mouse spleen tissue slide using 84637-1-RR (CD45.2 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using CD45.2 antibody (84637-1-RR, Clone: 241543F9) at dilution of 1:400 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of un-fixed frozen OCT-embedded mouse spleen tissue using CD45.2 antibody (84637-1-RR, Clone: 241543F9) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BL1) kinetic assays of 84637-1-RR against Mouse CD45.2 were performed. The affinity constant is 23.9 nM.