

CD45 (8C1) Mouse mAb

Catalog # AP53505

Specification

CD45 (8C1) Mouse mAb - Product Information

Application WB, IHC-P, IF
Primary Accession P06800
Host Mouse

Clonality Monoclonal Antibody

Calculated MW 144837

CD45 (8C1) Mouse mAb - Additional Information

Gene ID 19264

Other Names GP180, L CA, CD45 antigen

DilutionWB~~1:1000
IHC-P~~1:200
IF~~1:200

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.

Storage

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

CD45 (8C1) Mouse mAb - Protein Information

Name Ptprc {ECO:0000312|MGI:MGI:97810}

Synonyms Ly-5

Function

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 (By similarity). Dephosphorylates LYN, and thereby modulates LYN activity. Interacts with CLEC10A at antigen presenting cell-T cell contact; CLEC10A on immature dendritic cells recognizes Tn antigen-carrying PTPRC/CD45 receptor on effector T cells and modulates T cell activation threshold to limit autoreactivity.

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P08575}; Single-pass type I membrane protein. Membrane raft {ECO:0000250|UniProtKB:P08575}. Synapse {ECO:0000250|UniProtKB:P08575}



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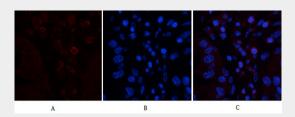
Note=Colocalized with DPP4 in membrane rafts {ECO:0000250|UniProtKB:P08575}

CD45 (8C1) Mouse mAb - Protocols

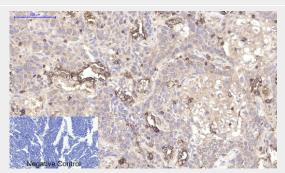
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CD45 (8C1) Mouse mAb - Images

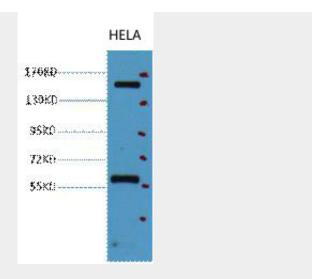


Immunofluorescence analysis of human-liver-cancer tissue. 1,CD45 Monoclonal Antibody(12A9)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

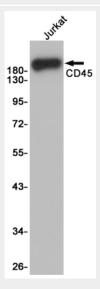


Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1,CD45 Monoclonal Antibody(12A9) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.





Western blot analysis of Hela, diluted at 1:2000.



Western blot detection of CD45 in Jurkat cell lysates using CD45 (8C1) Mouse mAb(1:1000 diluted). Predicted band size:147KDa. Observed band size:180 to 240KDa.

CD45 (8C1) Mouse mAb - Background

Swiss-Prot Acc.P06800.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.