For Research Use Only

CD53 Recombinant antibody

Catalog Number:84837-1-RR



Basic Information

Catalog Number: GenBank Accession Number: 84837-1-RR NM_000560.4

Concentration: GeneID (NCBI): 1000 µ g/ml 963

Source: UNIPROT ID:
Rabbit P19397
Isotype: Full Name:
IgG CD53 molecule
Immunogen Catalog Number: Calculated MW:
EG2182 24kDa

Observed MW: 40 kDa Purification Method: Protein A purfication

242038C5

Protein A purfication CloneNo.:

Recommended Dilutions: WB 1:2000-1:12000 IHC 1:500-1:2000 IF/ICC 1:250-1:1000

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA Species Specificity:

human

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: Jurkat cells, Ramos cells, IM-9 cells

IHC: human tonsillitis tissue,

IF/ICC: Jurkat cells, Daudi cells

Background Information

CD53 is also named as MOX44 and Tetraspanin-25 (Tspan-25). Tetraspanin CD53 is a member of the tetraspanin superfamily expressed exclusively within the immune compartment (PMID: 32440787). T cells depend on the phosphatase CD45 to initiate T cell receptor signaling. CD53 is shown to stabilize CD45 on the membrane and is required for optimal phosphatase activity and subsequent Lck activation. Together, CD53 as a regulator of CD45 activity required for T cell immunity (PMID: 35767951). CD53 is a marker for positively selected CD4+ CD8+ thymocytes (PMID: 11867561).

Storage

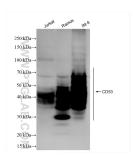
Storage

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

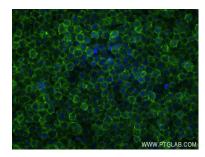
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

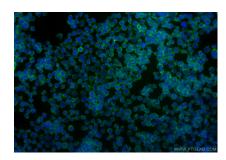
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 84837-1-RR (CD53 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



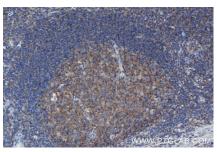
Immunofluorescent analysis of (4% PFA) fixed Daudi cells using CD53 antibody (84837-1-RR, Clone: 242038C5) at dilution of 1:250 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



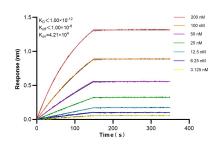
Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using CD53 antibody (84837-1-RR, Clone: 242038C5) at dilution of 1:500 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 84837-1-RR (CD53 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 84837-1-RR (CD53 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 84837-1-RR against Human CD53 were performed. The affinity constant is below 1 pM.