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CD5 Monoclonal Antibody(10G8)

Catalog # AP63325

Product Information

Application	IHC, IF, ICC
Primary Accession	P06127
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Calculated MW	54578

Additional Information

Gene ID	921
Other Names	CD5; LEU1; T-cell surface glycoprotein CD5; Lymphocyte antigen T1/Leu-1; CD5
Dilution	IHC~~1:100~500 IF~~1:50~200 ICC~~N/A
Format	PBS, pH 7.4, containing 0.09% (W/V) sodium azide as Preservative and 50% Glycerol.
Storage Conditions	-20℃

Protein Information

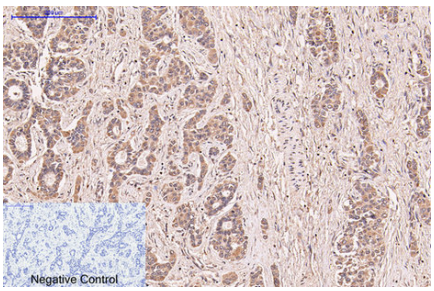
Name	CD5
Synonyms	LEU1
Function	Lymphoid-specific receptor expressed by all T-cells and in a subset of B-cells known as B1a cells. Plays a role in the regulation of TCR and BCR signaling, thymocyte selection, T-cell effector differentiation and immune tolerance. Acts by interacting with several ligands expressed on B-cells such as CD5L or CD72 and thereby plays an important role in contact-mediated, T-dependent B-cell activation and in the maintenance of regulatory T and B-cell homeostasis. Functions as a negative regulator of TCR signaling during thymocyte development by associating with several signaling proteins including LCK, CD3Z chain, PI3K or CBL (PubMed:1384049, PubMed:1385158). Mechanistically, co- engagement of CD3 with CD5 enhances phosphorylated CBL recruitment leading to increased VAV1 phosphorylation and degradation (PubMed:23376399). Modulates B-cell biology through ERK1/2 activation in a Ca(2+)-dependent pathway via the non-selective Ca(2+) channel TRPC1, leading to IL-10 production (PubMed:27499044).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P13379}; Single-pass type I

membrane protein {ECO:0000250|UniProtKB:P13379}

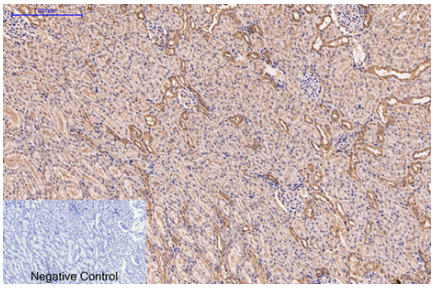
Background

May act as a receptor in regulating T-cell proliferation.

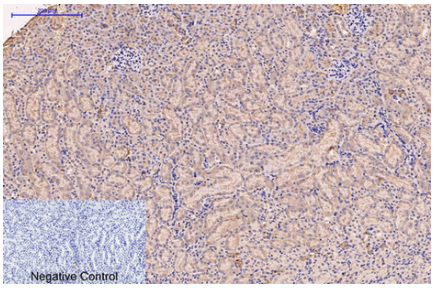
Images



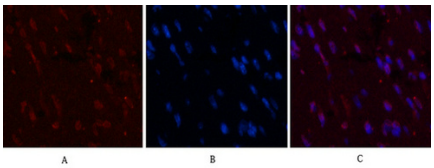
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,CD5 Monoclonal Antibody(10G8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



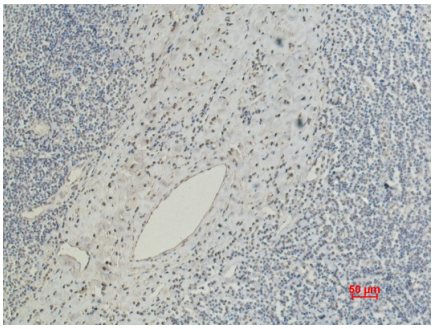
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,CD5 Monoclonal Antibody(10G8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1,CD5 Monoclonal Antibody(10G8) 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.



Immunofluorescence analysis of Mouse-heart tissue. 1,CD5 Monoclonal Antibody(10G8)(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 Tonsil Caricnoma using CD5 Mouse mAb diluted at 1:200.