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Anti-CD82 Picoband Antibody

Catalog # ABO11865

Product Information

Application	WB, IHC-P
Primary Accession	P27701
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for CD82 antigen(CD82) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3732
Other Names	CD82 antigen, C33 antigen, IA4, Inducible membrane protein R2, Metastasis suppressor Kangai-1, Suppressor of tumorigenicity 6 protein, Tetraspanin-27, Tspan-27, CD82, CD82, KAI1, SAR2, ST6, TSPAN27
Calculated MW	29626
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Membrane; Multi-pass membrane protein.
Tissue Specificity	Lymphoid specific.
Source	Eukaryota
Protein Name	CD82 antigen
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human CD82 recombinant protein (Position: A98-Y267). Human CD82 shares 69% and 67% amino acid (aa) sequences identity with mouse and rat CD82, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the tetraspanin (TM4SF) family.

Protein Information

Name	CD82
Synonyms	KAI1, SAR2, ST6, TSPAN27
Function	Structural component of specialized membrane microdomains known as tetraspanin-enriched microdomains (TERMs), which act as platforms for receptor clustering and signaling (PubMed:19497983). Participates thereby in diverse biological functions such as cell signal transduction, adhesion, migration and protein trafficking. Acts as a attenuator of EGF signaling, facilitating ligand-induced endocytosis of the receptor and its subsequent desensitization (PubMed:10985391, PubMed:35538033). Mechanistically, modulates ligand- induced ubiquitination and trafficking of EGFR via E3 ligase CBL phosphorylation by PKC (PubMed:23897813). Increases cell-matrix adhesion by regulating the membrane organization of integrin alpha4/ITA4 (PubMed:24623721, PubMed:8757325). Modulates adhesion and suppresses cell migration through other integrins such as the alpha6/ITGA6 and beta1/ITGB1 (PubMed:15557282, PubMed:17560548). Decreases cell-associated plasminogen activation by interfering with the interaction between urokinase-type plasminogen activator/PLAU and its receptor PLAUR (PubMed:15677461). Associates with CD4 or CD8 and delivers costimulatory signals for the TCR/CD3 pathway. Plays a role in TLR9 trafficking to acidified CpG-containing compartments by controlling interaction between TLR9 and VAMP3 and subsequent myddosome assembly (By similarity). Inhibits LPS-induced inflammatory response by preventing binding of LPS to TLR4 on the cell surface (PubMed:36945827). Plays a role in the activation of macrophages into anti-inflammatory phenotypes (By similarity). Independently of Toll- like receptor (TLR) signaling, is recruited to pathogen-containing phagosomes prior to fusion with lysosomes and thereby participates in antigen presentation (By similarity). Also acts to control angiogenesis and switch angiogenic milieu to quiescent state by binding and sequestering VEGFA and PDGFB to inhibit the signaling they trigger via their respective cell surface receptor (PubMed:34530889).
Cellular Location	Cell membrane {ECO:0000269|PubMed:19497983, ECO:0000269|PubMed:23897813, ECO:0000269|PubMed:30463011, ECO:0000269|PubMed:34530889, ECO:0000269|PubMed:8757325, ECO:0000269|Ref.4}; Multi-pass membrane protein Cytoplasmic vesicle, phagosome {ECO:0000250|UniProtKB:P40237}
Tissue Location	Lymphoid specific.

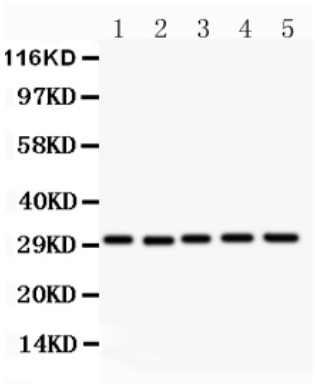
Background

CD82(Cluster of Differentiation 82), also named KAI1, is a protein that in humans encoded by the CD82 gene. The gene is mapped to 11p11.2. This metastasis suppressor gene product is a membrane glycoprotein that is a member of the transmembrane 4 superfamily. Expression of this gene has been shown to be downregulated in tumor progression of human cancers and can be activated by p53 through a consensus binding sequence in the promoter. The expression of CD82 protein appears to be correlated with lymph node metastasis in esophageal squamous cell carcinoma(ESCC). And the CD82 overexpression can suppress tumor invasiveness and metastatic potential by inducing MMP9 inactivation via upregulation of TIMP1.

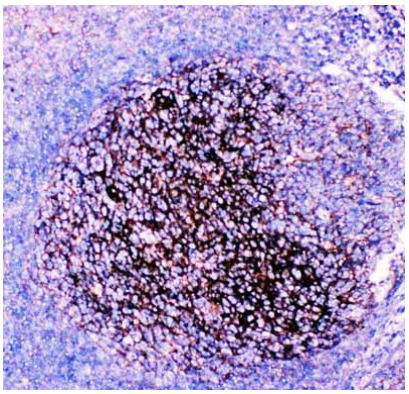
Images



Anti-CD82 Picoband antibody, ABO11865, Western blottingAll lanes: Anti CD82 (ABO11865) at 0.5ug/mlWB: Recombinant Human CD82 Protein 0.5ngPredicted bind size: 36KDObserved bind size: 36KD



Anti- CD82 Picoband antibody, ABO11865, Western blottingAll lanes: Anti CD82 (ABO11865) at 0.5ug/mlLane 1: HL-60 Whole Cell Lysate at 40ugLane 2: CEM Whole Cell Lysate at 40ugLane 3: HUT Whole Cell Lysate at 40ugLane 4: U937 Whole Cell Lysate at 40ugLane 5: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 30KDObserved bind size: 30KD



Anti-CD82 Picoband antibody, ABO11865, IHC(P)IHC(P): Human Tonsil Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.