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Anti-CD82 Picoband Antibody

Catalog # ABO11865

Specification

Anti-CD82 Picoband Antibody - Product Information

Application	**WB, IHC**
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.

Anti-CD82 Picoband Antibody - 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 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Membrane; Multi-pass membrane protein.

Tissue Specificity
Lymphoid specific.

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.

Anti-CD82 Picoband Antibody - 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). Acts also 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}

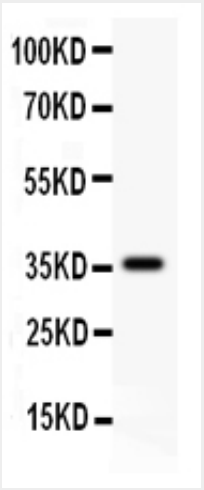
Tissue Location
Lymphoid specific.

Anti-CD82 Picoband Antibody - 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

Anti-CD82 Picoband Antibody - 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

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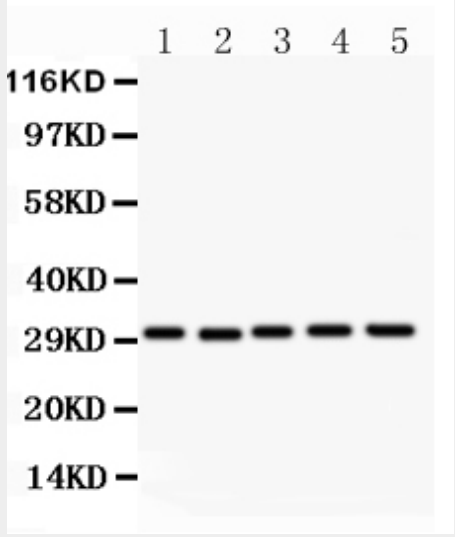
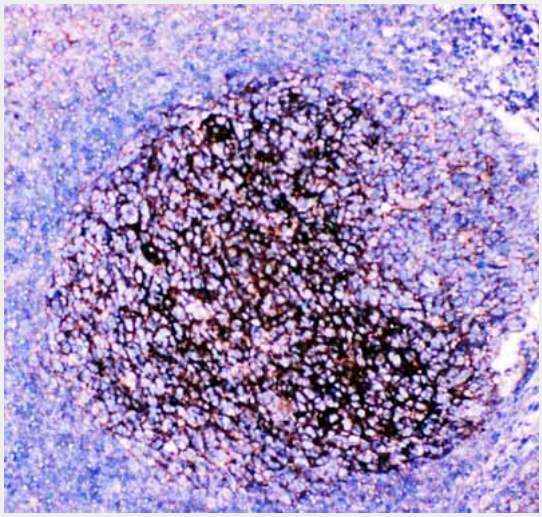


Anti- CD82 Picoband antibody, ABO11865, Western blottingAll lanes: Anti CD82 (ABO11865) at 0.5ug/mlLane 1: HL-60 Whole Cell Lysate at 40ugLane 2: CEM Whole Cell Lysate at 40ugLane 3: HUT Whole Cell Lysate at 40ugLane 4: U937 Whole Cell Lysate at 40ugLane 5: MCF-7 Whole Cell Lysate at 40ugPredicted bind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



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

Anti-CD82 Picoband Antibody - 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.