

CD82 Antibody - middle region

Rabbit Polyclonal Antibody Catalog # AI14948

Product Information

Application WB Primary Accession P27701

Other Accession NM 001024844, NP 001020015

Reactivity Human
Predicted Human
Host Rabbit
Clonality Polyclonal
Calculated MW 29626

Additional Information

Gene ID 3732

Alias Symbol 4F9, C33, GR15, IA4, KAI1, R2, SAR2, ST6, TSPAN27

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

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-CD82 antibody concentration is 1 mg/ml

in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C.

Avoid repeat freeze-thaw cycles.

Precautions CD82 Antibody - middle region is for research use only and not for use in

diagnostic or therapeutic procedures.

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:<u>19497983</u>). 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:<u>10985391</u>, PubMed:<u>35538033</u>). Mechanistically,

modulates ligand- induced ubiquitination and trafficking of EGFR via E3 ligase CBL phosphorylation by PKC (PubMed: <u>23897813</u>). 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}

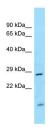
Tissue Location

Lymphoid specific.

References

Gaugitsch H.W.,et al.Eur. J. Immunol. 21:377-383(1991). Imai T.,et al.J. Immunol. 149:2879-2886(1992). Dong J.T.,et al.Science 268:884-886(1995). Zhou G.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Dong J.T.,et al.Genomics 41:25-32(1997).

Images



WB Suggested Anti-CD82 Antibody Titration: 1.0 μg/ml Positive Control: Fetal Brain

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