

## **CD82 Antibody**

Rabbit mAb Catalog # AP91505

## **Specification**

#### **CD82 Antibody - Product Information**

Application WB, IHC, FC
Primary Accession P27701
Reactivity Rat
Clonality Monoclonal

**Other Names** 

C33; CD82; IA4; Inducible membrane protein; KAI1; Kangai1; SAR2; ST6; Tetraspanin 27; Tspan27;

Isotype Rabbit IgG
Host Rabbit
Calculated MW 29626 Da

# **CD82 Antibody - Additional Information**

Purification Affinity-chromatography

Immunogen A synthesized peptide derived from human

**CD82** 

Description Associates with CD4 or CD8 and delivers

costimulatory signals for the TCR/CD3

pathway.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline,

pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid

freeze / thaw cycle.

## **CD82 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:<a href="http://www.uniprot.org/citations/19497983" target="\_blank">19497983</a>). 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:<a

href="http://www.uniprot.org/citations/10985391" target="\_blank">10985391</a>, PubMed:<a href="http://www.uniprot.org/citations/35538033" target="\_blank">35538033</a>).

Mechanistically, modulates ligand- induced ubiquitination and trafficking of EGFR via E3 ligase CBL phosphorylation by PKC (PubMed:<a href="http://www.uniprot.org/citations/23897813" target="\_blank">23897813</a>). Increases cell-matrix adhesion by regulating the membrane



organization of integrin alpha4/ITA4 (PubMed:<a

href="http://www.uniprot.org/citations/24623721" target=" blank">24623721</a>, PubMed:<a href="http://www.uniprot.org/citations/8757325" target="\_blank">8757325</a>). Modulates adhesion and suppresses cell migration through other integrins such as the alpha6/ITGA6 and beta1/ITGB1 (PubMed:<a href="http://www.uniprot.org/citations/15557282" target=" blank">15557282</a>, PubMed:<a href="http://www.uniprot.org/citations/17560548" target=" blank">17560548</a>). Decreases cell-associated plasminogen activation by interfering with the interaction between urokinase-type plasminogen activator/PLAU and its receptor PLAUR (PubMed:<a href="http://www.uniprot.org/citations/15677461" target="\_blank">15677461</a>). 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:<a href="http://www.uniprot.org/citations/36945827" target=" blank">36945827</a>). 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: <a href="http://www.uniprot.org/citations/34530889" target=" blank">34530889</a>).

#### **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.

## **CD82 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## CD82 Antibody - Images



