

# **KAI1 Antibody**

Catalog # ASC10515

# **Specification**

# **KAI1 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

**Application Notes** 

WB, IHC, IF P27701

NP\_002222, 4504813 Human, Mouse, Rat

Rabbit Polyclonal

IgG

KAI1 antibody can be used for detection of

KAI1 by Western blot at 0.5 - 1 μg/mL.

Antibody can also be used for

immunohistochemistry starting at 2.5  $\mu g/mL$ . For immunofluorescence start at 20

μg/mL.

# **KAI1 Antibody - Additional Information**

Gene ID 3732

**Other Names** 

KAI1 Antibody: R2, 4F9, C33, IA4, ST6, GR15, KAI1, SAR2, TSPAN27, CD82 antigen, C33 antigen, Tspan-27, CD82 molecule

**Target/Specificity** 

CD82:

### **Reconstitution & Storage**

KAI1 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

KAI1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **KAI1 Antibody - Protein Information**

Name CD82

Synonyms KAI1, SAR2, ST6, TSPAN27

#### **Function**

Associates with CD4 or CD8 and delivers costimulatory signals for the TCR/CD3 pathway.

### **Cellular Location**

Cell membrane; Multi-pass membrane protein



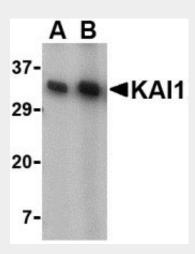
**Tissue Location** Lymphoid specific.

# **KAI1 Antibody - Protocols**

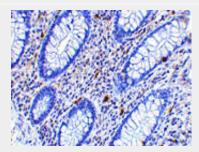
Provided below are standard protocols that you may find useful for product applications.

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

# **KAI1 Antibody - Images**

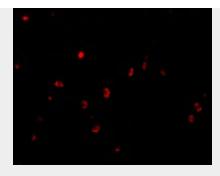


Western blot analysis of KAI1 in A549 cell lysate with KAI1 antibody at (A) 0.5 and (B) 1  $\mu$ g/mL.



Immunohistochemistry of KAI1 in human colon tissue with KAI1 antibody at 2.5 μg/mL.





Immunofluorescence of KAI1 in Human Colon cells with KAI1 antibody at 20 µg/mL.

# KAI1 Antibody - Background

KAI1 Antibody: KAI1 was initially identified from a T-cell activation study as a four-transmembrane protein that plays an accessory role in T-cell activation, and was later determined to act as a cancer metastasis suppressor gene. This protein is ubiquitously expressed at moderate to high levels in most tissues, but its expression is downregulated during tumor progression. The loss of KAI1 and p53 is associated with poor survival for prostate and other cancer patients. Recently, KAI1 was found to interact with DARC, the Duffy antigen for chemokines using a yeast two hybrid screen. It is thought that tumor cells dislodged from the primary tumor and expressing KAI1 interact with DARC proteins expressed on vascular cells, transmitting a senescent signal to the tumor cells, while tumor cells that have lost KAI1 expression can proliferate and potentially give rise to metastases. At least two isoforms of KAI1 are known to exist.

# **KAI1 Antibody - References**

HW Gaugitsch, Hofer E, Huber NE, et al. A new superfamily of lymphoid and melanoma cell proteins with extensive homology to Schistosoma mansoni antigen SM23. Eur. J. Immunol.1991; 21:377-83. Gil ML, Vita N, Lebel-Binay S, et al. A member of the tetra spans transmembrane protein superfamily is recognized by a monoclonal antibody raised against an HLA class I-deficient, lymphokine-activated killer-susceptible, B lymphocyte line. Cloning and functional studies. J. Immunol.1992; 2826-33.

Dong JT, Lamb PW, Rinker-Schaeffer CW, et al. KAI1, a metastasis suppressor gene for prostate cancer on human chromosome 11p11.2. Science1995; 884-86.

Kauffman EC, Robinson VL, Stadler WM, et al. Metastasis suppression: the evolving role of metastasis suppressor genes for regulating cancer cell growth at the secondary site. J. Urol.2003; 169:1122-33.