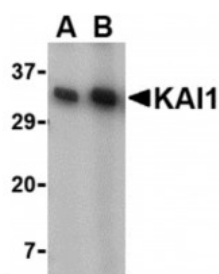


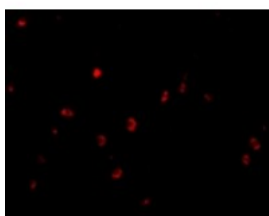


## KAI1 Antibody

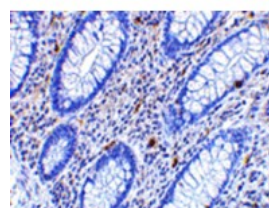
CATALOG NUMBER: 4073



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



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



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

### Specifications

<b>SPECIES REACTIVITY:</b>	Human, Mouse, Rat
<b>TESTED APPLICATIONS:</b>	ELISA, IF, IHC-P, WB
<b>APPLICATIONS:</b>	KAI1 antibody can be used for detection of KAI1 by Western blot at 0.5 - 1 ug/mL. Antibody can also be used for immunohistochemistry starting at 2.5 ug/mL. For immunofluorescence start at 20 ug/mL.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>POSITIVE CONTROL:</b>	1) Cat. No. 1203 - A549 Cell Lysate 2) Cat. No. 1320 - Human Colon Tissue Lysate
<b>IMMUNOGEN:</b>	KAI1 antibody was raised against a 15 amino acid synthetic peptide from near the carboxy terminus of human KAI1.  The immunogen is located within the last 50 amino acids of KAI1.
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	KAI1 Antibody is affinity chromatography purified via peptide column.
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	KAI1 Antibody is supplied in PBS containing 0.02% sodium azide.
<b>CONCENTRATION:</b>	1 mg/mL
<b>STORAGE CONDITIONS:</b>	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.
<b>CLONALITY:</b>	Polyclonal
<b>ISOTYPE:</b>	IgG
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

<b>ALTERNATE NAMES:</b>	KAI1 Antibody: R2, 4F9, C33, IA4, ST6, GR15, KAI1, SAR2, TSPAN27, CD82 antigen, C33 antigen, Tspan-27
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<b>ACCESSION NO.:</b>	NP_002222
<b>PROTEIN GI NO.:</b>	4504813
<b>OFFICIAL SYMBOL:</b>	CD82
<b>GENE ID:</b>	3732

## Background

**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.

- REFERENCES:**
- 1) 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.
  - 2) 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.
  - 3) 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.
  - 4) 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.

**FOR RESEARCH USE ONLY**

December 12, 2016