

KANK1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8596b**Specification**

KANK1 Antibody - Product Information

Application	WB, IHC-P,E
Primary Accession	Q14678
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Calculated MW	147289

KANK1 Antibody - Additional Information**Gene ID** 23189**Other Names**

KN motif and ankyrin repeat domain-containing protein 1, Ankyrin repeat domain-containing protein 15, Kidney ankyrin repeat-containing protein, KANK1, ANKRD15, KANK, KIAA0172

Target/Specificity

This KANK1 antibody is generated from a mouse immunized with a recombinant protein of human KANK1.

Dilution

WB~~1:2000

IHC-P~~1:25

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

KANK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

KANK1 Antibody - Protein Information**Name** KANK1**Synonyms** ANKRD15, KANK, KIAA0172**Function** Involved in the control of cytoskeleton formation by regulating actin polymerization.

Inhibits actin fiber formation and cell migration (PubMed:[25961457](#)). Inhibits RhoA activity; the function involves phosphorylation through PI3K/Akt signaling and may depend on the competitive interaction with 14-3-3 adapter proteins to sequester them from active complexes (PubMed:[25961457](#)). Inhibits the formation of lamellipodia but not of filopodia; the function may depend on the competitive interaction with BAIAP2 to block its association with activated RAC1 (PubMed:[25961457](#)). Inhibits fibronectin-mediated cell spreading; the function is partially mediated by BAIAP2. Inhibits neurite outgrowth. Involved in the establishment and persistence of cell polarity during directed cell movement in wound healing. In the nucleus, is involved in beta-catenin-dependent activation of transcription. Potential tumor suppressor for renal cell carcinoma. Regulates Rac signaling pathways (PubMed:[25961457](#)).

Cellular Location

Cell projection, ruffle membrane. Cytoplasm. Nucleus Note=Colocalizes with KIF21A in membrane ruffles (PubMed:19559006) Shuttles between the cytoplasm and nucleus (PubMed:16968744) [Isoform 2]: Cytoplasm. Nucleus Note=Shuttles between the cytoplasm and nucleus

Tissue Location

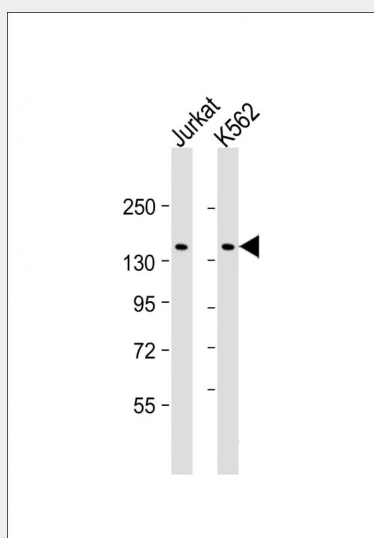
Widely expressed. Isoform 1 is predominantly expressed in heart and kidney. Isoform 2 probably is widely expressed at basic levels.

KANK1 Antibody - Protocols

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

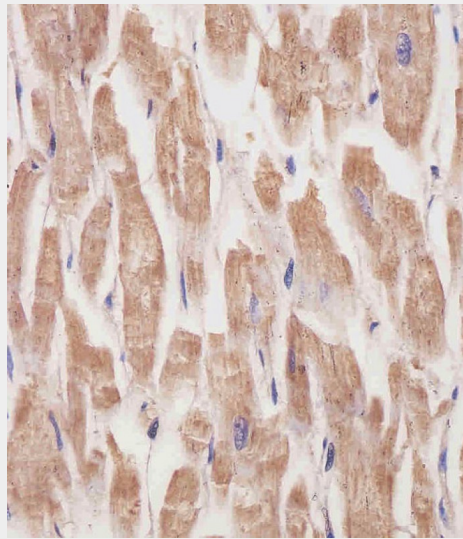
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KANK1 Antibody - Images



All lanes : Anti-KANK1 Antibody at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L),

Peroxidase conjugated at 1/10000 dilution. Predicted band size : 147 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



AM8596b staining KANK1 in human heart tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

KANK1 Antibody - Background

Involved in the control of cytoskeleton formation by regulating actin polymerization. Inhibits actin fiber formation and cell migration. Inhibits RhoA activity; the function involves phosphorylation through PI3K/Akt signaling and may depend on the competitive interaction with 14-3-3 adapter proteins to sequester them from active complexes. Inhibits the formation of lamellipodia but not of filopodia; the function may depend on the competitive interaction with BAIAP2 to block its association with activated RAC1. Inhibits fibronectin-mediated cell spreading; the function is partially mediated by BAIAP2. Inhibits neurite outgrowth. Involved in the establishment and persistence of cell polarity during directed cell movement in wound healing. In the nucleus, is involved in beta-catenin-dependent activation of transcription. Potential tumor suppressor for renal cell carcinoma.

KANK1 Antibody - References

Nagase T., et al. DNA Res. 3:17-24(1996).
Humphray S.J., et al. Nature 429:369-374(2004).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Sarkar S., et al. J. Biol. Chem. 277:36585-36591(2002).
Wang Y., et al. Biochem. Biophys. Res. Commun. 330:1247-1253(2005).

KANK1 Antibody - Citations

- [Upregulation of the Kank1 gene inhibits human lung cancer progression in vitro and in vivo.](#)