

KANK1 Antibody (N-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS16019

Specification

KANK1 Antibody (N-Terminus) - Product Information

Application IF, IHC Primary Accession 014678

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Calculated MW 147kDa KDa

KANK1 Antibody (N-Terminus) - 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

Two alternatively spliced transcript variants encoding different isoforms have been identified. The lower molecular weight band seen in the immunoblot is thought to be non-specific.

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

KANK1 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

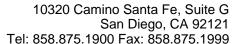
KANK1 Antibody (N-Terminus) - Protein Information

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: <a href="http://www.uniprot.org/citations/25961457"

Cellular Location

target=" blank">25961457).

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

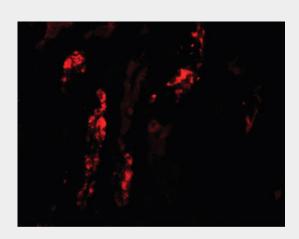
Widely expressed. Isoform 1 is predominantly expressed in heart and kidney. Isoform 2 probably is widely expressed at basic levels.

KANK1 Antibody (N-Terminus) - Protocols

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

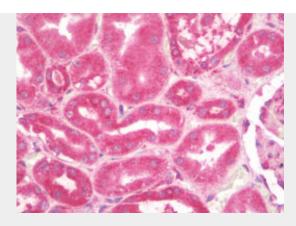
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KANK1 Antibody (N-Terminus) - Images



Immunofluorescence of KANK1 in human kidney tissue with KANK1 antibody at 20 ug/ml.





Anti-KANK1 antibody IHC staining of human kidney.

KANK1 Antibody (N-Terminus) - 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 competetive 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 competetive 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 (N-Terminus) - 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).