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# KANK2 Antibody

Catalog # ASC11647

## Product Information

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| **Application** | WB, IF, E, IHC-P |
| **Primary Accession** | Q63ZY3 |
| **Other Accession** | NP_056308, 258613875 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 91174 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | KANK2 Antibody can be used for detection of KANK2 by Western blot at 1 g/mL. |

## Additional Information

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| **Gene ID** | 25959 |
| **Other Names** | KN motif and ankyrin repeat domain-containing protein 2, Ankyrin repeat domain-containing protein 25, Matrix-remodeling-associated protein 3, SRC-1-interacting protein, SIP, SRC-interacting protein, SRC1-interacting protein, KANK2, ANKRD25, KIAA1518, MXRA3, SIP |
| **Target/Specificity** | KANK2; Two alternatively spliced transcript variants encoding different isoforms have been identified. |
| **Reconstitution & Storage** | KANK2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. |
| **Precautions** | KANK2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | KANK2 |
| **Synonyms** | ANKRD25, KIAA1518, MXRA3, SIP |
| **Function** | Involved in transcription regulation by sequestering in the cytoplasm nuclear receptor coactivators such as NCOA1, NCOA2 and NCOA3 (PubMed:17476305). Involved in regulation of caspase-independent apoptosis by sequestering the proapoptotic factor AIFM1 in mitochondria (PubMed:22371500). Pro-apoptotic stimuli can induce its proteasomal degradation allowing the translocation of AIFM1 to the nucleus to induce apoptosis (PubMed:22371500). Involved in the negative control of vitamin D |

receptor signaling pathway (PubMed:24671081). Involved in actin stress fibers formation through its interaction with ARHGDIA and the regulation of the Rho signaling pathway (PubMed:17996375, PubMed:25961457). May thereby play a role in cell adhesion and migration, regulating for instance podocytes migration during development of the kidney (PubMed:25961457). Through the Rho signaling pathway may also regulate cell proliferation (By similarity).

**Cellular Location** Cytoplasm. Mitochondrion

**Tissue Location** Strongly expressed in cervix, colon, heart, kidney and lung. Expressed in kidney glomerular podocytes and mesangial cells (at protein level).

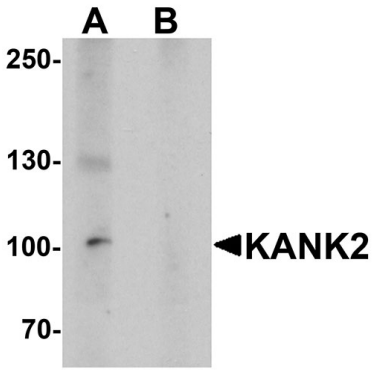
## Background

KANK2 Antibody: Ankyrins are membrane adaptor molecules that play important roles in the control of cytoskeleton formation by regulating actin polymerization. KANK2 (KN motif and ankyrin repeat domain-containing protein 2), was initially identified as a steroid receptor coactivator (SRC) interacting protein (SIP) that could sequester steroid receptor coactivators in the cytoplasm. More recent experiments have shown that while KANK2 is widely expressed, in kidney podocytes, KANK2 localizes to foot processes, suggesting that KANK2 may contribute to controlling actin dynamics in podocyte foot processes.

## References

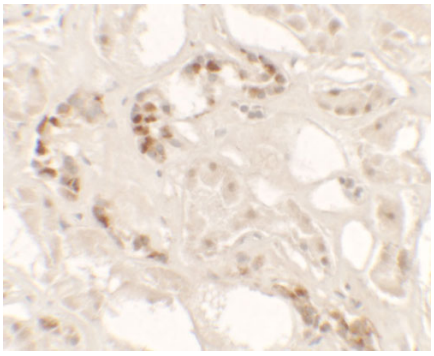
Zhu Y, Kakinuma N, Wang Y, et al. Kank proteins: a new family of ankyrin-repeat domain containing proteins. Biochim. Biophys. Acta 2008; 1780:128-33.
Roy BC, Kakinuma N, Kiyama R. Kank attenuates actin remodeling by preventing interaction between IRSp53 and Rac1. J. Cell Biol. 2009; 184:253-67.
Zhang Y, Zhang H, Liang J, et al. SIP, a novel ankyrin repeat containing protein, sequesters steroid receptor coactivators in the cytoplasm. EMBO J. 2007; 26:2645-57.
Xu X, Patrakka J, Sistani L, et al. Expression of novel podocyte-associated proteins sult1b1 and ankrd25. Nephron Exp. Nephrol. 2011; 117:e39-46.

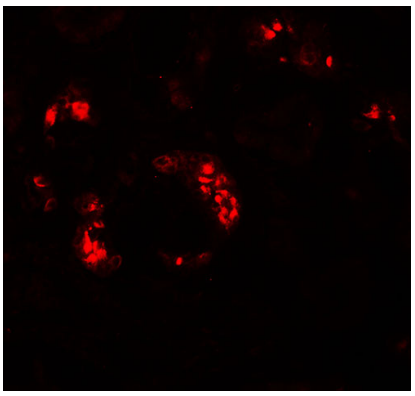
## Images




Western blot analysis of KANK2 in mouse brain tissue lysate with KANK2 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.

Immunohistochemistry of KANK2 in human kidney tissue with KANK2 antibody at 2.5 µg/ml.





Immunofluorescence of KANK2 in human kidney tissue with KANK2 antibody at 20 µg/ml.