

KIP2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8158a

Product Information

Application	IHC-P, WB, E
Primary Accession	O75838
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB4073-4074
Calculated MW	21644
Antigen Region	8-37

Additional Information

Gene ID	10518
Other Names	Calcium and integrin-binding family member 2, Kinase-interacting protein 2, KIP 2, CIB2, KIP2
Target/Specificity	This KIP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 8-37 amino acids from the N-terminal region of human KIP2.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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	KIP2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CIB2
Synonyms	KIP2
Function	Calcium- and integrin-binding protein that plays a role in intracellular

calcium homeostasis (By similarity). Acts as an auxiliary subunit of the sensory mechanoelectrical transduction (MET) channel in hair cells (By similarity). Essential for mechanoelectrical transduction (MET) currents in auditory hair cells and thereby required for hearing (By similarity). Regulates the function of hair cell mechanotransduction by controlling the distribution of transmembrane channel-like proteins TMC1 and TMC2, and by regulating the function of the MET channels in hair cells (By similarity). Required for the maintenance of auditory hair cell stereocilia bundle morphology and function and for hair-cell survival in the cochlea (By similarity). Critical for proper photoreceptor cell maintenance and function (By similarity). Plays a role in intracellular calcium homeostasis by decreasing ATP-induced calcium release (PubMed:[23023331](#), PubMed:[26173970](#), PubMed:[26426422](#)).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q9Z309}. Cell projection, stereocilium. Photoreceptor inner segment {ECO:0000250|UniProtKB:Q9Z309}. Cell projection, cilium, photoreceptor outer segment {ECO:0000250|UniProtKB:Q9Z309}. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:Q9Z309}. Note=Colocalizes with ITGA7 at the myotendinous junctions (MTJ) and at the neuromuscular junctions (NMJ) (By similarity). Located mainly in stereocilia and at the apical surface of hair cells of the cochlea (By similarity). Localizes in the cuticular plate along and at the tip of the stereocilia of vestibular sensory hair cells (PubMed:26173970, PubMed:26426422) {ECO:0000250|UniProtKB:Q9Z309, ECO:0000269|PubMed:26173970, ECO:0000269|PubMed:26426422}

Tissue Location

Widely expressed (PubMed:23023331).

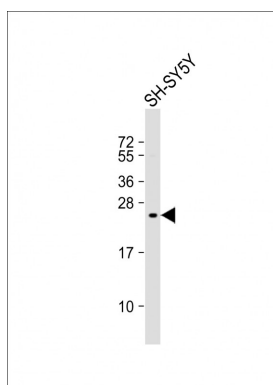
Background

DNA-dependent protein kinases (DNA-PK) play a role in the repair of double-strand DNA breaks and in the process of V(D)J recombination during lymphoid development. By EST database searching for sequences homologous to the DNA-PK gene KIP/CIB and 5-prime RACE, Seki, N et al. isolated a full-length cDNA, which they designated as KIP2, from a human fetal brain cDNA library. KIP2 encodes a deduced 187-amino acid protein with a predicted molecular mass of 22 kD. The KIP2 protein shares 46%, 39%, and 30% sequence identity with the calcium-binding proteins KIP/CIB, calcineurin B and calmodulin respectively. KIP2 contains two EF-hand motifs and a helix-loop-helix motif involved in coordinating the calcium ion, indicating that KIP2 may also bind calcium. KIP2 is ubiquitously expressed in various human tissues.

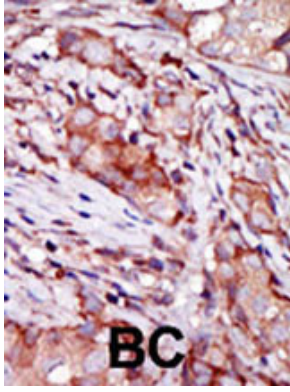
References

Seki, N., et al., Biochim. Biophys. Acta 1444(1):143-147 (1999).

Images



Anti-KIP2 Antibody (N-term) at 1:1000 dilution + SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.