

Datasheet for ABIN7317350 **CIB2 Protein (His tag)**



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Overview

Quantity:	100 µg
Target:	CIB2
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CIB2 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human CIB2/KIP-2 Protein (His Tag)
Sequence:	Met 1-Ile 187
Characteristics:	A DNA sequence encoding the mature form of human CIB2 (075838) (Met 1-Ile 187) was expressed, with a polyhistide tag at the N-terminus.
Purity:	> 75 % as determined by reducing SDS-PAGE.

Target Details

Target:	CIB2
Alternative Name:	CIB2/KIP-2 (CIB2 Products)
Background:	Background: Calcium and integrin-binding protein 2 (CIB2) belongs to a protein family with four known members, CIB1 through CIB4, which are characterized by multiple calcium-binding EF-hand domains. Sensorineural hearing loss is genetically heterogeneous. The mutations in CIB2, which encodes a calcium- and integrin-binding protein, are associated with nonsyndromic

Target Details

deafness (DFNB48) and Usher syndrome type 1J (USH1J). Furthermore, in zebrafish and *Drosophila melanogaster*, CIB2 is essential for the function and proper development of hair cells and retinal photoreceptor cells. We also show that CIB2 is a new member of the vertebrate Usher interactome. Variants in CIB2 can underlie either Usher syndrome type I (USH1J) or nonsyndromic hearing impairment (NSHI) (DFNB48). CIB2 is widely expressed in various human and animal tissues, mainly in skeletal muscle, nervous tissue, inner ear, and retina. The CIB2 protein is responsible for maintaining Ca(2+) homeostasis in cells and interacting with integrins-transmembrane receptors essential for cell adhesion, migration, and activation of signaling pathways. Calcium signaling pathway is crucial for signal transduction in the inner ear, and integrins regulate hair cell differentiation and maturation of the stereocilia.

Synonym: DFNB48,KIP2,USH1J

Molecular Weight:	23.1 kDa
UniProt:	O75838

Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 50 mM Tris, 20 % glycerol, pH 8.0
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.