

Anti-CIB2 Antibody (3T556)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	3T556
Purification:	Protein A

Applications

Verified Activity:	1. Immunochemical staining of human CIB2 in human heart with rabbit monoclonal antibody (1:2000, formalin-fixed paraffin embedded sections).
	2. Immunochemical staining of human CIB2 in human brain with rabbit monoclonal antibody (1:2000, formalin-fixed paraffin embedded sections).
Application:	ELISA,ELISA(Det),IHC-P
Recommended	ELISA: 1:5000-1:10000; IHC-P: 1:1000-1:4000; ELISA(Det): 1:1000-1:10000

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Human CIB2 protein (TMPY-02289)
Antigen Species:	Human
Synonyms:	calcium and integrin binding family member 2;KIP2;DFNB48;USH1J

Research 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 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 Ca²⁺ homeostasis in cells and interacting with integrin-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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481