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USH1C Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19566a

Product Information

Application	WB, E
Primary Accession	Q9Y6N9
Other Accession	Q9ES64, Q3MHQ0, NP_005700.2
Reactivity	Human, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41722
Calculated MW	62211
Antigen Region	1-30

Additional Information

Gene ID	10083
Other Names	Harmonin, Antigen NY-CO-38/NY-CO-37, Autoimmune enteropathy-related antigen AIE-75, Protein PDZ-73, Renal carcinoma antigen NY-REN-3, Usher syndrome type-1C protein, USH1C, AIE75
Target/Specificity	This USH1C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human USH1C.
Dilution	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 purified through a protein A column, followed by peptide affinity purification.
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	USH1C Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	USH1C
Synonyms	AIE75

Function	Anchoring/scaffolding protein that is a part of the functional network formed by USH1C, USH1G, CDH23 and MYO7A that mediates mechanotransduction in cochlear hair cells. Required for normal development and maintenance of cochlear hair cell bundles (By similarity). As part of the intermicrovillar adhesion complex/IMAC plays a role in brush border differentiation, controlling microvilli organization and length. Probably plays a central regulatory role in the assembly of the complex, recruiting CDHR2, CDHR5 and MYO7B to the microvilli tips (PubMed:24725409, PubMed:26812018).
Cellular Location	Cytoplasm, cytosol. Cytoplasm, cytoskeleton. Cell projection, microvillus Note=Colocalizes with F-actin (By similarity). Detected at the tip of cochlear hair cell stereocilia (By similarity). Enriched in microvilli of the intestinal brush border (PubMed:24725409, PubMed:32209652) {ECO:0000250|UniProtKB:Q9ES64, ECO:0000269|PubMed:24725409, ECO:0000269|PubMed:32209652}
Tissue Location	Expressed in small intestine, colon, kidney, eye and weakly in pancreas. Expressed also in vestibule of the inner ear

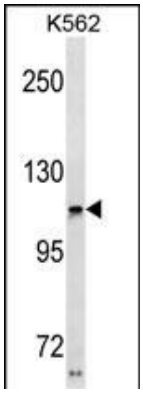
Background

This gene encodes a scaffold protein that functions in the assembly of Usher protein complexes. The protein contains PDZ domains, a coiled-coil region with a bipartite nuclear localization signal and a PEST degradation sequence. Defects in this gene are the cause of Usher syndrome type 1C and non-syndromic sensorineural deafness autosomal recessive type 18. Multiple transcript variants encoding different isoforms have been found for this gene.

References

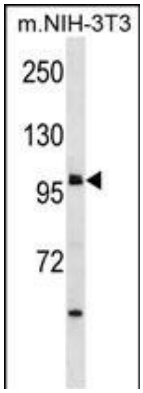
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Yan, J., et al. Proc. Natl. Acad. Sci. U.S.A. 107(9):4040-4045(2010)
Jaijo, T., et al. Invest. Ophthalmol. Vis. Sci. 51(3):1311-1317(2010)
Pan, L., et al. Proc. Natl. Acad. Sci. U.S.A. 106(14):5575-5580(2009)
Baux, D., et al. Hum. Mutat. 29 (8), E76-E87 (2008) :

Images



USH1C Antibody (N-term) (Cat. #AP19566a) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the USH1C antibody detected the USH1C protein (arrow).

USH1C Antibody (N-term) (Cat. #AP19566a) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane).This demonstrates the USH1C antibody detected the USH1C protein (arrow).



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