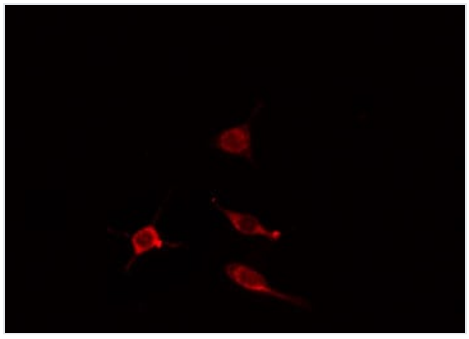
IQCB1 Antibody – Rabbit Polyclonal

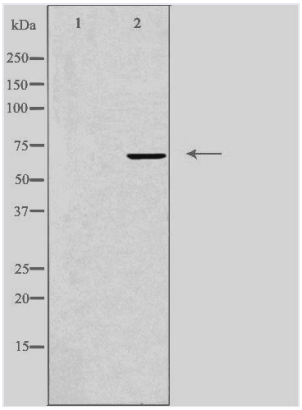
PRODUCT OVERVIEW

Product Name	IQCB1, Polyclonal Antibody
Full Product Name	IQCB1 Antibody
Product Gene Name	anti-IQCB1 antibody
Product Synonym Names	IQ calmodulin-binding motif containing 1; IQ calmodulin-binding motif-containing protein 1; IQ motif containing B1; Iqcb1; IQCB1_HUMAN; KIAA0036; Nephrocystin-5; NPHP5; p53 and DNA damage-regulated IQ motif protein; SLSN5
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Concentration	1mg/ml (lot specific)
Specificity	IQCB1 antibody detects endogenous levels of total IQCB1
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.
Antibody/Peptide Pairs	IQCB1 peptide (MBS9624305) is used for blocking the activity of IQCB1 antibody (MBS9605588)
Molecular Weight	Observed: 69 kD Predicted: 69 kDa
3D Structure	ModBase 3D Structure for Q15051
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Immunogen	A synthesized peptide
Subcellular Location	Photoreceptor connecting cilium
Tissue Specificity	Ubiquitously expressed in fetal and adult tissues. Localized to the outer segments and connecting cilia of photoreceptor cells. Up-regulated in a number of primary colorectal and gastric tumors.
Predicted Cross Reactivity	**Horse, Rabbit, Dog**
Similarity	Horse (82%), Rabbit (91%), Dog (82%)
Conjugation	Unconjugated
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-IQCB1 antibody	Western Blot (WB), Immunofluorescence (IF), Immunocytochemistry (ICC), ELISA (EIA)
Application Notes for anti-IQCB1 antibody	WB: 1:500-1:1000 IF/ICC: 1:100-1:500

Related Product Information for anti-IQCB1 antibody	Function: Involved in ciliogenesis. The function in an early step in cilia formation depends on its association with CEP290/NPHP6 (PubMed:21565611, PubMed:23446637). Involved in regulation of the BBSome complex integrity, specifically for presence of BBS2 and BBS5 in the complex, and in ciliary targeting of selected BBSome cargos. May play a role in controlling entry of the BBSome complex to cilia possibly implicating CEP290/NPHP6 (PubMed:25552655). Subunit Structure: Interacts with CEP290/NPHP6; IQCB1/NPHP5 and CEP290 are proposed to form a functional NPHP5-6 module/NPHP6; localized to the centrosome. Interacts with calmodulin, ATXN10 (PubMed:16322217, PubMed:15723066, PubMed:18723859, PubMed:21565611, PubMed:23446637, PubMed:25552655). Interacts with NPHP1, INVS, NPHP4 and RPGRIP1L; these interactions likely require additional interactors (By similarity). Associates with the BBSome complex; interacts with BBS1, BBS2, BBS4, BBS5, BBS7, BBS8 and BBS9 (PubMed:25552655). Similarity: The IQ domains mediate the interaction with calmodulin.
Other Notes	Small volumes of anti-IQCB1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for IQCB1 purchase	MBS9605588 is an antibody targeting IQCB1. Also known as IQCB1 Antibody. Reactive in Human. Host: Rabbit.



Immunofluorescence (IF) of anti-IQCB1 antibody
MBS9605588 staining Hela cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



Western Blot (WB) of anti-IQCB1 antibody
Western blot analysis of extracts from K562 cells, using IQCB1 antibody., The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for IQCB1. It may not necessarily be applicable to this product.

NCBI GI #	170014684
NCBI GeneID	9657
NCBI Accession #	NP_001018864.2
UniProt Primary Accession #	Q15051
UniProt Secondary Accession #	Q3KS08; Q3KS09; Q5DKQ7; Q8NI79; Q9BS08
UniProt Related Accession #	Q15051
GenBank Nucleotide #	NM_001023570.3
NCBI Official Full Name	IQ calmodulin-binding motif-containing protein 1 isoform a
NCBI Official Synonym Full Names	IQ motif containing B1
NCBI Official Symbol	IQCB1
NCBI Official Synonym Symbols	PIQ; NPHP5; SLSN5
UniProt Protein Name	IQ calmodulin-binding motif-containing protein 1
UniProt Synonym Protein Names	Nephrocystin-5; p53 and DNA damage-regulated IQ motif protein; PIQ

Protein Family	IQ calmodulin-binding motif-containing protein
UniProt Gene Name	IQCB1
UniProt Synonym Gene Names	KIAA0036; NPHP5; PIQ
NCBI Protein Information	IQ calmodulin-binding motif-containing protein 1
NCBI Summary for IQCB1	This gene encodes a nephrocystin protein that interacts with calmodulin and the retinitis pigmentosa GTPase regulator protein. The encoded protein has a central coiled-coil region and two calmodulin-binding IQ domains. It is localized to the primary cilia of renal epithelial cells and connecting cilia of photoreceptor cells. The protein is thought to play a role in ciliary function. Defects in this gene result in Senior-Loken syndrome type 5. Alternative splicing results in multiple transcript variants. A pseudogene of this gene is found on chromosome 6. [provided by RefSeq, Jan 2016]
UniProt Comments for IQCB1	Involved in ciliogenesis. The function in an early step in cilia formation depends on its association with CEP290/NPHP6 (PubMed:21565611, PubMed:23446637). Involved in regulation of the BBSome complex integrity, specifically for presence of BBS2 and BBS5 in the complex, and in ciliary targeting of selected BBSome cargos. May play a role in controlling entry of the BBSome complex to cilia possibly implicating CEP290/NPHP6 (PubMed:25552655).
Research Articles on IQCB1	**1.** Study demonstrates the interaction between CNNM4 and IQCB1, which provides the first link between CNNM4 and IQCB1 that causes Leber congenital amaurosis and retinal dystrophy when mutated, providing important insights into the molecular pathogenic mechanisms of retinal dystrophy in Jalili syndrome.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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