

Rabbit anti-Human, Mouse CEP290 Polyclonal Antibody | anti-CEP290 antibody

CEP290 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA324588	Rabbit	Human, Mouse	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

PRODUCT SYNONYMS

CEP290; Polyclonal Antibody; CEP290 Antibody; 3H11AG; Bardet-Biedl syndrome 14 protein; BBS14; Cancer/testis antigen 87; CE290_HUMAN; Centrosomal protein 290kDa; Centrosomal protein of 290 kDa; Cep290; CT87; CTCL tumor antigen se2 2; FLJ13615; FLJ21979; JBTS5; JBTS6; KIAA0373; LCA10; Meckel syndrome; type 4; MKS4; Monoclonal antibody 3H11 antigen; Nephrocystin 6; Nephrocystin-6; NPHP6; POC3; POC3 centriolar protein homolog; Prostate cancer antigen T21; rd16; SLSN6 1; 2; 5; SLSN6; Tumor antigen se2-2; anti-CEP290 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	CEP290 antibody detects endogenous levels of total CEP290
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	2479
Applicable Applications for anti-CEP290 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Cytoplasm > Cytoskeleton > Centrosome. Nucleus. Cell Projection > Cilium. Connecting cilium of photoreceptor cells, base of cilium in kidney intramedullary collecting duct cells.
Tissue Specificity	Ubiquitous. Expressed strongly in placenta and weakly in brain.
Predicted Cross Reactivity	Pig, Horse, Sheep, Rabbit, Dog
Similarity	Pig (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (91%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA324588 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.



WB (Western Blot)

Western blot analysis of extracts from K562 cells, using CEP290 antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-CEP290 antibody

Function: Involved in early and late steps in cilia formation. Its association with CCP110 is required for inhibition of primary cilia formation by CCP110 (PubMed:18694559). May play a role in early ciliogenesis in the disappearance of centriolar satellites and in the transition of primary ciliar vesicles (PCVs) to capped ciliary vesicles (CCVs). Required for the centrosomal recruitment of RAB8A and for the targeting of centriole satellite proteins to centrosomes such as of PCM1 (PubMed:24421332). Required for the correct localization of ciliary and phototransduction proteins in retinal photoreceptor cells; may play a role in ciliary transport processes (By similarity). Required for efficient recruitment of RAB8A to primary cilium (PubMed:17705300). In the ciliary transition zone is part of the tectonic-like complex which is required for tissue-specific ciliogenesis and may regulate ciliary membrane composition (By similarity). Involved in regulation of the BBSome complex integrity, specifically for presence of BBS2, BBS5 and BBS8/TTC8 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 IQCB1/NPHP5 (PubMed:25552655). Activates ATF4-mediated transcription (PubMed:16682973).

Subunit Structure: Part of the tectonic-like complex (also named B9 complex) (By similarity). Interacts with ATF4 via its N-terminal region (PubMed:16682973). Associates with the BBSome complex (PubMed:25552655, PubMed:23943788), interacting (via N-terminus) with BBS4 (PubMed:23943788). Interacts with IQCB1/NPHP5; IQCB1 and CEP290/NPHP6 are proposed to form a functional NPHP5-6 module localized to the centrosome. Interacts with NPHP4; the interaction likely requires additional interactors. Interacts with ZNF423, FAM161A, CEP162, CEP162, CEP131, TALPID3, CCDC13, CC2D2A, RPGRIP1 (PubMed:18950740, PubMed:18723859, PubMed:21565611, PubMed:22863007, PubMed:22940612, PubMed:22797915, PubMed:23446637, PubMed:23644468, PubMed:24421332, PubMed:24816561, PubMed:20200501). Can self-associate (homo- or heteromeric) (PubMed:18723859). Interacts with CCP110; required for suppressing cilia formation (PubMed:18694559). Interacts with RPGR (By similarity). Associates (via C-terminus) with microtubules (PubMed:24121310, PubMed:24051377); association to microtubule is reduced in response to cellular stress, such as ultraviolet light (UV) radiation or heat shock, in a process that requires p38 MAP kinase signaling (PubMed:24121310). Interacts with FAM161A (By similarity). Interacts with PCM1 (By similarity).

Post-translational Modifications: Ubiquitinated. May undergo monoubiquitination; monoubiquitination is inhibited in response to cellular stress, such as ultraviolet light (UV) radiation or heat shock, but does not cause its displacement from centriolar satellites.

NCBI AND UNIPROT INFORMATION

NCBI GI #	109255234
NCBI GeneID	80184
NCBI Accession #	NP_079390.3
NCBI GenBank Nucleotide #	NM_025114.3
UniProt Accession #	O15078; Q1PSK5; Q66GS8; Q9H2G6; Q9H6Q7; Q9H8I0
Molecular Weight	Observed: 290 kD Predicted: 291 kDa
NCBI Official Full Name	centrosomal protein of 290 kDa
NCBI Official Synonym Full Names	centrosomal protein 290
NCBI Official Symbol	CEP290

NCBI Official Synonym Symbols	CT87; MKS4; POC3; rd16; BBS14; JBTS5; LCA10; NPHP6; SLSN6; 3H11Ag
NCBI Protein Information	centrosomal protein of 290 kDa
UniProt Protein Name	Centrosomal protein of 290 kDa
UniProt Gene Name	CEP290
UniProt Synonym Gene Names	BBS14; KIAA0373; NPHP6; Cep290; CT87

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cep290-antibody-immunocytochemistry-immunofluorescence-western-blot-elisa/324588>