

Anti-CEP290 [1C3G10]

Catalogue number: 153781

Sub-type: Primary antibody

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-CEP290 [1C3G10]

Alternate name: Centrosomal protein of 29 kDa, Cep29, Bardet-Biedl syndrome 14 protein, Cancer/testis antigen 87, CT87, Nephrocystin-6, Tumor antigen se2-2

Class: Monoclonal

Conjugate: Unconjugated

Description: CEP290 is 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 ciliary 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).

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender:

Isotype:

IgG2a

Reactivity: Human

Selectivity:

Host: Mouse

Immunogen: Recombinant human CEP290 amino acids 1-299 (bacterially expressed from pGEX4T as a GST fusion, then thrombin-cleaved and purified).

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details:

Formulation:

Recommended controls: IF and WB: hTERT-RPE1 cells

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target: CEP290, UniProt ID:O15078

Target alternate names:

Target background: CEP290 is 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 ciliary 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).

Molecular weight: 290 kDa

Ic50:

Applications

Application: IHC ; IF ; WB

Application notes:

Handling

Format: Liquid

Concentration: 0.9-1.1 mg/ml

Passage number:

Growth medium:

Temperature:

Atmosphere:

Volume:

Storage medium:

Storage buffer: PBS with 0.02% azide

Storage conditions: -15° C to -25° C

Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Flynn et al. 2020. Hum Mol Genet. 29(3):407-417. PMID: 31868218. ; Khouj et al. 2019. J Cell Sci. 132(19):. PMID: 31492759. ; Ogungbenro et al. 2018. J Cell Biol. 217(4):1205-1215. PMID: 29440264. ; Sieben et al. 2018. Nat Methods. 15(10):777-780. PMID: 30275574. ; Daly et al. 2016. J Cell Sci. 129(9):1769-74. PMID: 26966185.