

**Beta tubulin cofactor D Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP58775****Specification****Beta tubulin cofactor D Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	<a href="#">Q9BTW9</a>
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	133 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TBCD/Beta tubulin cofactor D 401-500/1192
Epitope Specificity	IgG
Isotype	
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell junction, tight junction (Bysimilarity). Lateral cell membrane (By similarity). Cytoplasm (Bysimilarity). Cell junction, adherens junction (By similarity).Note=Localized in cell-cell contacts (By similarity).
SIMILARITY	Belongs to the TBCD family.Contains 3 HEAT repeats.
SUBUNIT	Found in a complex with at least ARL2, PPP2CB, PPP2R1A,PPP2R2A, PPP2R5E and TBCD. Interacts with PPP2CB. Interacts withARL2 (By similarity). Supercomplex made of cofactors A to E.Cofactors A and D function by capturing and stabilizing tubulin ina quasi-native conformation. Cofactor E binds to the cofactorD-tubulin complex; interaction with cofactor C then causes therelease of tubulin polypeptides that are committed to the nativestate. Interacts with ARL2; interaction is enhanced with theGDP-bound form of ARL2. Does not interact with ARL3, ARL4A andARL4D. Interacts with beta tubulin.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

Tubulin-folding protein; involved in the first step of the tubulin folding pathway. Modulates microtubule dynamics by capturing GTP-bound beta-tubulin (TUBB). Acts as a GTPase-activating

protein (GAP) for ARL2. Its ability to interact with beta tubulin is regulated via its interaction with ARL2. Induces microtubule disruption in absence of ARL2. Increases degradation of beta tubulin, when overexpressed in polarized cells. Promotes epithelial cell detachment, a process antagonized by ARL2. Induces tight adherens and tight junctions disassembly at the lateral cell membrane.

## **Beta tubulin cofactor D Polyclonal Antibody - Additional Information**

**Gene ID** 6904

### **Other Names**

Tubulin-specific chaperone D, Beta-tubulin cofactor D, tfcD, SSD-1, Tubulin-folding cofactor D, TBCD, KIAA0988, SSD1, TFCD

### **Target/Specificity**

Ubiquitously expressed.

### **Dilution**

<span class = "dilution\_WB">WB~~1:1000</span><br \><span class = "dilution\_IHC-P">IHC-P~~N/A</span><br \><span class = "dilution\_IHC-F">IHC-F~~N/A</span><br \><span class = "dilution\_IF">IF~~1:50~200</span><br \><span class = "dilution\_E">E~~N/A</span>

### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

### **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **Beta tubulin cofactor D Polyclonal Antibody - Protein Information**

**Name** TBCD

**Synonyms** KIAA0988, SSD1, TFCD

### **Function**

Tubulin-folding protein implicated in the first step of the tubulin folding pathway and required for tubulin complex assembly. Involved in the regulation of microtubule polymerization or depolymerization, it modulates microtubule dynamics by capturing GTP- bound beta-tubulin (TUBB). Its ability to interact with beta tubulin is regulated via its interaction with ARL2. Acts as a GTPase-activating protein (GAP) for ARL2. Induces microtubule disruption in absence of ARL2. Increases degradation of beta tubulin, when overexpressed in polarized cells. Promotes epithelial cell detachment, a process antagonized by ARL2. Induces tight adherens and tight junctions disassembly at the lateral cell membrane (PubMed:<a href="http://www.uniprot.org/citations/10722852" target="\_blank">10722852</a>, PubMed:<a href="http://www.uniprot.org/citations/10831612" target="\_blank">10831612</a>, PubMed:<a href="http://www.uniprot.org/citations/11847227" target="\_blank">11847227</a>, PubMed:<a href="http://www.uniprot.org/citations/20740604" target="\_blank">20740604</a>, PubMed:<a href="http://www.uniprot.org/citations/27666370" target="\_blank">27666370</a>, PubMed:<a href="http://www.uniprot.org/citations/28158450" target="\_blank">28158450</a>). Required for correct assembly and maintenance of the mitotic spindle, and proper progression of mitosis (PubMed:<a href="http://www.uniprot.org/citations/27666370" target="\_blank">27666370</a>). Involved in neuron morphogenesis (PubMed:<a href="http://www.uniprot.org/citations/27666374" target="\_blank">27666374</a>).

target="\_blank">27666374</a>).

#### Cellular Location

Cell junction, tight junction {ECO:0000250|UniProtKB:Q28205}. Lateral cell membrane {ECO:0000250|UniProtKB:Q28205}. Cytoplasm {ECO:0000250|UniProtKB:Q28205}. Cell junction, adherens junction {ECO:0000250|UniProtKB:Q28205}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Note=Localized in cell-cell contacts. {ECO:0000250|UniProtKB:Q28205}

#### Tissue Location

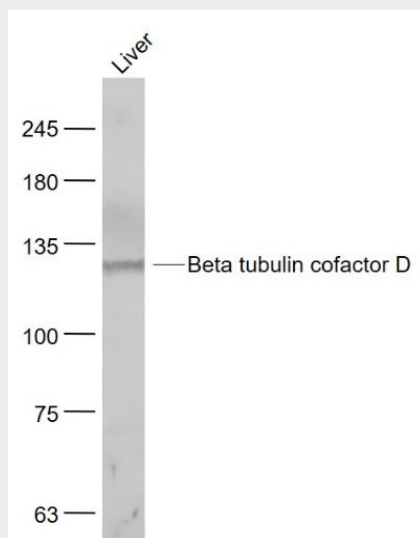
Ubiquitously expressed.

### Beta tubulin cofactor D Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Beta tubulin cofactor D Polyclonal Antibody - Images



#### Sample:

Liver (Mouse) Lysate at 40 ug

Primary: Anti- Beta tubulin cofactor D (bs-7849R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 133 kD

Observed band size: 133 kD