For Research Use Only

TCTN1 Polyclonal antibody

Catalog Number: 15004-1-AP 29 Publications



Basic Information

Catalog Number: GenBank Accession Number: 15004-1-AP BC062611
Size: GeneID (NCBI): 79600
Source: UNIPROT ID: Rabbit Q2MV58
Isotype: Full Name:

IgG tectonic family member 1

Immunogen Catalog Number: Calculated MW:

AG6099 64 kDa

Observed MW: 55-64 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat Cited Species:

human, mouse, zebrafish

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls:

WB: fetal human brain tissue, mouse brain tissue, rat

Purification Method:

WB 1:500-1:1000

IHC 1:20-1:200

IF-P 1:200-1:500

IF/ICC 1:200-1:800

Antigen affinity purification

Recommended Dilutions:

brain tissue

IHC: human kidney tissue,

IF-P: human kidney tissue, hTERT-RPE1 cells

IF/ICC: hTERT-RPE1 cells,

Background Information

Tectonic-1, encoded by TCTN1 (TECT1) gene, belongs to the tectonic family of secreted and transmembrane proteins. Tectonic-1 is a component of the tectonic-like complex, a complex localized at the transition zone of primary cilia and acting as a barrier that prevents diffusion of transmembrane proteins between the cilia and plasma membranes. Multiple transcript variants encoding different isoforms have been found for this gene. Defects in TCTN1 are the cause of Joubert syndrome type 13 (JBTS13), a disorder presenting with cerebellar ataxia, oculomotor apraxia, hypotonia, neonatal breathing abnormalities and psychomotor delay. During neural tube development, mouse Tectonic is required for formation of the most ventral cell types and for full Hedgehog (Hh) pathway activation. Epistasis analyses reveal that Tectonic modulates Hh signal transduction downstream of Smoothened (Smo) and Rab23.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|--------------------|-----------|------------|-------------|
| Philipp P Prosseda | 28871046 | J Cell Sci | IF |
| Laura Vuolo | 30320547 | Elife | IF |
| Eunji Jung | 31914703 | FASEB J | IF |

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

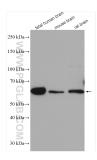
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

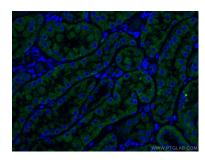
W: ptgcn.com

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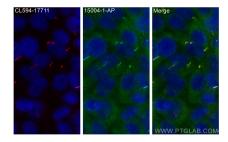
Selected Validation Data



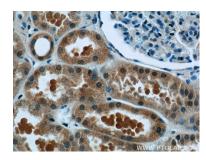
Various lysates were subjected to SDS PAGE followed by western blot with 15004-1-AP (TCTN1 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using TCTN1 antibody (15004-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (-20°C Methanol) fixed hTERT-RPE1 cells using TCTN1 antibody (15004-1-AP) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L), CoraLite® 594 ARL13B antibody (CL594-17711, red).



Immunohistochemical analysis of paraffinembedded human kidney tissue slide using 15004-1-AP (TCTN1 Antibody) at dilution of 1:50 (under 60) lens)