# For Research Use Only

# MKS1 Polyclonal antibody

Catalog Number: 16206-1-AP 28 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

16206-1-AP BC010061 GeneID (NCBI): Size:

150ul, Concentration: 650 ug/ml by 54903 Nanodrop and 267 ug/ml by Bradford  $\,$  UNIPROT ID: method using BSA as the standard; Q9NXB0

Source: Full Name:

Rabbit Meckel syndrome, type 1 Isotype:

Calculated MW: IgG 559 aa, 65 kDa Immunogen Catalog Number: Observed MW: AG9177 65-70 kDa

**Purification Method:** Antigen affinity purification Recommended Dilutions:

WB 1:500-1:2000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:500 IF 1:20-1:200

**Applications** 

**Tested Applications:** WB, IP, IF, IHC, ELISA

**Cited Applications:** 

WB. IF

Species Specificity: human, mouse, rat

Cited Species: human, mouse

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: mouse brain tissue, HEK-293 cells, HeLa cells, mouse uterus tissue. SH-SY5Y cells

IP: HEK-293 cells,

IHC: human liver cancer tissue,

IF: hTERT-RPE1 cells and Mouse embryonic fibroblasts,

# **Background Information**

MKS1 (Meckel syndrome type 1 protein) is a 559-amino acid protein that contains a conserved B9 domain. It is a component of a large protein complex which localizes to the ciliary transition zone and regulates mammalian ciliogenesis and ciliary membrane composition (PMID: 21725307). MKS1 is required for ciliary structure and function, and is involved in centrosome migration to the apical cell surface during early ciliogenesis (PMID: 17185389; 19515853). Broad tissue expression of the MKS1 gene has been reported (PMID: 16415886). Defects in MKS1 are the cause of Meckel syndrome type 1 (MKS1), an autosomal recessive lethal malformation syndrome characterized by renal cystic dysplasia, central nervous system malformations, and hepatic developmental defects (PMID: 16415886). In addition, defects in MKS1 are also the cause of Bardet-Biedl syndrome type 13 (BBS13) (PMID: 18327255).

### **Notable Publications**

Author	Pubmed ID	Journal	Application
T Tony Yang	26365165	Sci Rep	IF
Yunfan Yang	25342559	Cell Res	WB
Gisela G Slaats	26490104	J Med Genet	WB, IF

Storage

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

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

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact: T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free

in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com W: ptglab.com

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## **Selected Validation Data**

MKS1 marks the transition zone

Basal body/MKS1/cilla

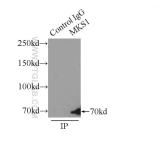
Basal body/MKS1/cilla

Human hTERT-RPE1 Cells Mouse Embryonic Fibroblasts

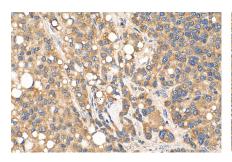
IF result from Dr. Corbit, Kevin. anti-MKS1 (16206-1-AP) marks the transition zone of Human hTERT-RPE1 cells and Mouse embryonic fibroblasts.

250kd→  $150kd \rightarrow$   $100kd \rightarrow$   $70kd \rightarrow$   $50kd \rightarrow$   $40kd \rightarrow$ 

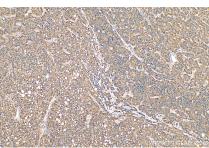
mouse brain tissue were subjected to SDS PAGE followed by western blot with 16206-1-AP (MKS1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



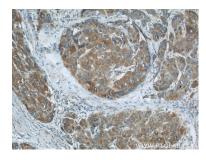
IP result of anti-MKS1 (IP:16206-1-AP, 3ug; Detection:16206-1-AP 1:1000) with HEK-293 cells lysate 4500ug.



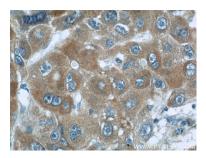
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 16206-1-AP (MKS1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 16206-1-AP (MKS1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human liver cancer using 16206-1-AP (MKS1 antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffinembedded human liver cancer using 16206-1-AP (MKS1 antibody) at dilution of 1:50 (under 40x lens).