

For Research Use Only

# DACH1 Polyclonal antibody

Catalog Number:10914-1-AP

Featured Product

75 Publications



## Basic Information

### Catalog Number:

10914-1-AP

### Size:

150ul , Concentration: 600 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG1354

### GenBank Accession Number:

BC021219

### GeneID (NCBI):

1602

### UNIPROT ID:

Q9UI36

### Full Name:

dachshund homolog 1 (Drosophila)

### Calculated MW:

79 kDa

### Observed MW:

97-110 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:5000-1:50000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, ChIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, 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 : H9C2 cells, HEK-293 cells

IP : HEK-293 cells,

IHC : human oesophagus cancer tissue, mouse brain tissue

IF/ICC : HEK-293 cells,

## Background Information

DACH1, a homologue of the Drosophila dachshund gene, is a key regulator of cell fate determination during eye, leg, and brain development in the fly. Through interacting with NCoR and Smad4, DACH1 is able to inhibit the transforming growth factor-beta (TGF-beta) signaling pathway. DACH1 can inhibit breast cancer cellular proliferation via cyclin D1, suggesting a possible role in tumor suppression. Additionally, DACH1 plays an important role in negative regulation of RANKL (Receptor activator of NF-kappaB ligand) gene expression in marrow stromal/preosteoblast cells. Dach1 expression is enriched in rECs, which are associated with osteoprogenitors and bone-resorbing osteoclasts, and overexpression of DACH1 in postnatal mice induces a strong increase in arteries and type R capillaries, leading to local metabolic changes and enabling trabecular bone formation in normally highly hypoxic areas of the diaphysis (PMID: 39528700). Moreover, Loss of DACH1 expression might be involved in endometrial cancer progression. Four isoforms of DACH1 are produced by alternative splicing. This antibody is a rabbit polyclonal antibody raised against residues near the C terminus of human DACH1.

## Notable Publications

Author	Pubmed ID	Journal	Application
Fernando Bonet	30204931	Dev Dyn	IF
Masahiro Okabe	30379099	Am J Physiol Renal Physiol	IHC,IF
Wenji Yan	24149323	Epigenetics	

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

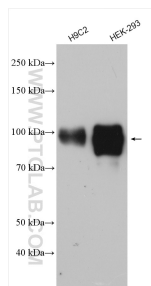
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

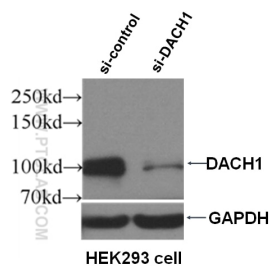
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

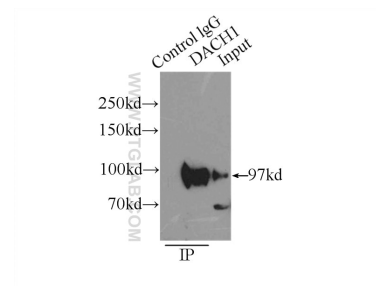
## Selected Validation Data



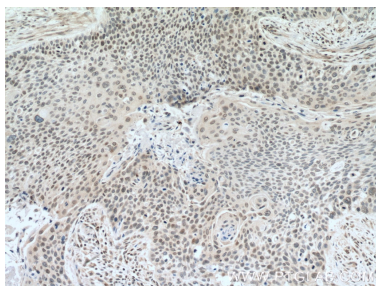
Various lysates were subjected to SDS PAGE followed by western blot with 10914-1-AP (DACH1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



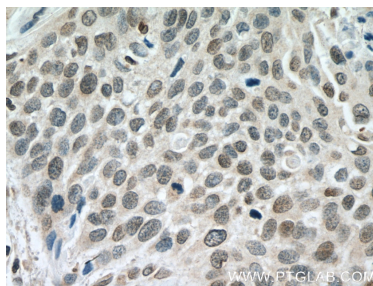
WB result of DACH1 (10914-1-AP, 1:4000) with si-control and si-DACH1 transfected HEK293 cells.



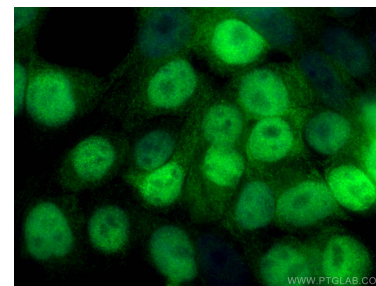
IP result of anti-DACH1 (IP:10914-1-AP, 4ug; Detection:10914-1-AP 1:1000) with HEK-293 cells lysate 6000ug.



Immunohistochemical analysis of paraffin-embedded human oesophagus cancer tissue slide using 10914-1-AP (DACH1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human oesophagus cancer tissue slide using 10914-1-AP (DACH1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using DACH1 antibody (10914-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).