

For Research Use Only

DACH1 Polyclonal antibody

Catalog Number: 10914-1-AP

Featured Product

75 Publications



Basic Information

Catalog Number:

10914-1-AP

Concentration:

600 ug/ml

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

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

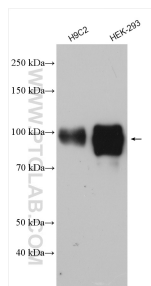
T: 4006900926

E: Proteintech-CN@ptglab.com

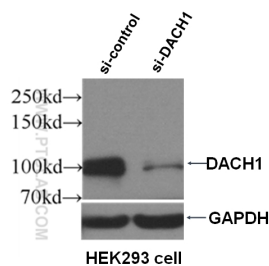
W: ptgcn.com

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

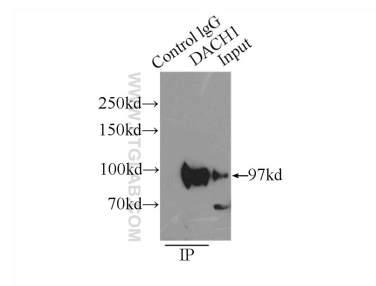
Selected Validation Data



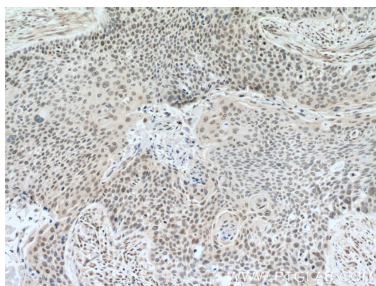
Various lysates were subjected to SDS PAGE followed by western blot with 10914-1-AP (DACH1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



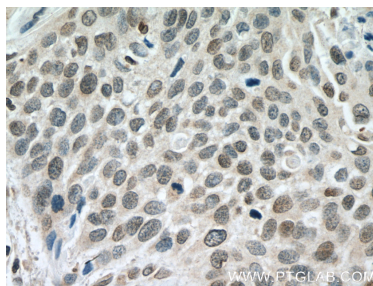
WB result of DACH1 (10914-1-AP, 1:4000) with si-control and si-DACH1 transfected HEK293 cells.



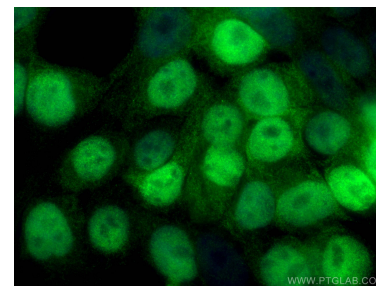
IP result of anti-DACH1 (IP:10914-1-AP, 4ug; Detection:10914-1-AP 1:1000) with HEK-293 cells lysate 6000ug.



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).