

For Research Use Only

# DACH1 Monoclonal antibody, PBS Only

Catalog Number: 60082-1-PBS

Featured Product



## Basic Information

Catalog Number:

60082-1-PBS

Size:

100ug , Concentration: 1 mg/ml by Nanodrop;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG4474

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:

Protein G purification

CloneNo.:

3B6D2

## Applications

Tested Applications:

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

Species Specificity:

human, mouse, rat

## 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, but isoform1(97-110kd) is the predominantly expressed form in tissue. This antibody is a mouse monoclonal antibody raised against residues near the C terminus of human DACH1.

## Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS Only

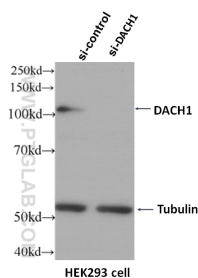
For technical support and original validation data for this product please contact:

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

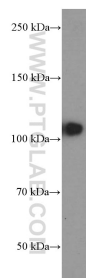
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

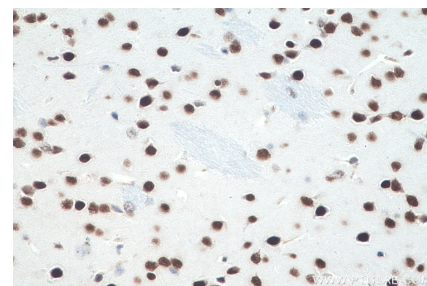
## Selected Validation Data



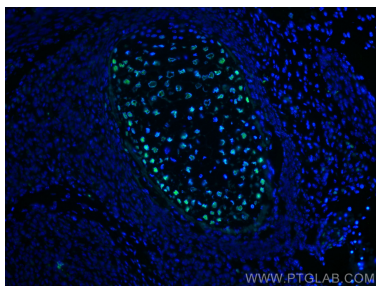
WB result of DACH1 (60082-1-Ig, 1:5000) with si-control and si-DACH1 transfected HEK293 cells. This data was developed using the same antibody clone with 60082-1-PBS in a different storage buffer formulation.



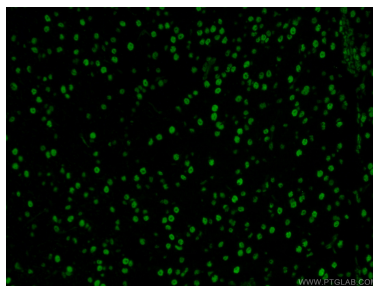
MCF-7 cells were subjected to SDS PAGE followed by western blot with 60082-1-Ig (DACH1 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 60082-1-PBS in a different storage buffer formulation.



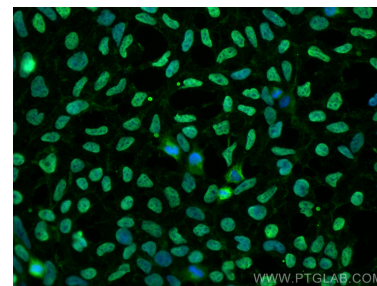
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 60082-1-Ig (DACH1 antibody) at dilution of 1:1 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60082-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse embryo tissue using DACH1 antibody (60082-1-Ig, Clone: 3B6D2 ) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 60082-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 60082-1-Ig (DACH1 antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 60082-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using DACH1 antibody (60082-1-Ig, Clone: 3B6D2 ) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 60082-1-PBS in a different storage buffer formulation.