

For Research Use Only

DACH1 Monoclonal antibody

Catalog Number: 60082-1-Ig

Featured Product

4 Publications



Basic Information

Catalog Number: 60082-1-Ig	GenBank Accession Number: BC021219	Purification Method: Protein G purification
Size: 150ul, Concentration: 1300 ug/ml by Nanodrop and 827 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 1602	CloneNo.: 3B6D2
Source: Mouse	UNIPROT ID: Q9UI36	Recommended Dilutions: WB 1:1000-1:4000 IF-P 1:200-1:800 IF/ICC 1:500-1:2000
Isotype: IgG1	Full Name: dachshund homolog 1 (Drosophila)	
Immunogen Catalog Number: AG4474	Calculated MW: 79 kDa	
	Observed MW: 97-110 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:
WB, IF, IP

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: MCF-7 cells, C6 cells, L02 cells, ROS1728 cells, HEK-293 cells

IF-P: mouse embryo 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, 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Shengru Liang	36511182	Cell Biol Int	WB
Qian Huang	38587806	Am J Respir Cell Mol Biol	WB,IP,IF
Vasudeva Bhat	38581619	Clin Exp Metastasis	WB

Storage

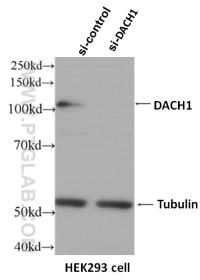
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

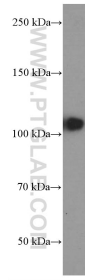
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

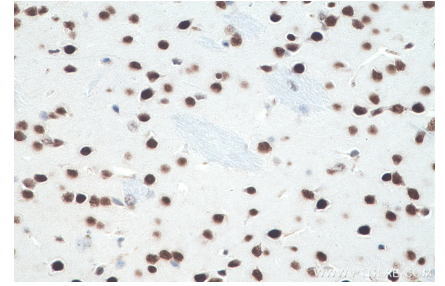
Selected Validation Data



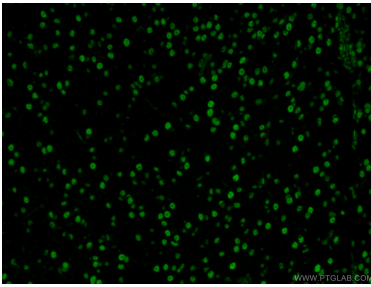
WB result of DACH1 (60082-1-Ig, 1:5000) with si-control and si-DACH1 transfected HEK293 cells.



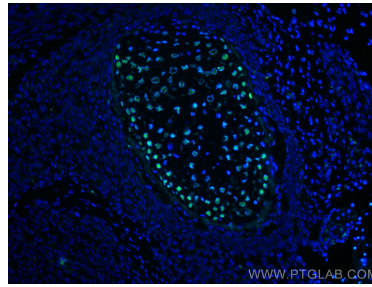
MCF-7 cells were subjected to SDS PAGE followed by western blot with 60082-1-Ig (DACH1 Antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



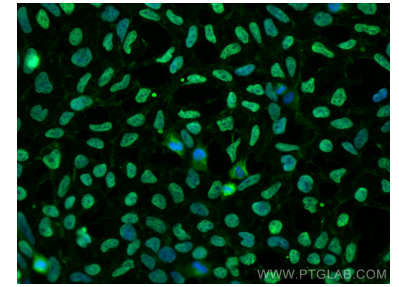
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 60082-1-Ig (DACH1 antibody) at dilution of 1:1 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).



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).