For Research Use Only

CoraLite®594-conjugated DACH1 Monoclonal antibody

Catalog Number: CL594-60082

Featured Product

1 Publications



Basic Information

Catalog Number: CL594-60082

Size: 1000 ug/ml Source: Mouse

lgG1 Immunogen Catalog Number:

GenBank Accession Number:

BC021219 GeneID (NCBI): 1602 **UNIPROT ID:**

Full Name: dachshund homolog 1 (Drosophila)

Calculated MW:

79 kDa

Q9UI36

Purification Method:

Protein G purification

CloneNo.: 3B6D2

Recommended Dilutions:

IF-P 1:50-1:500

Excitation/Emission maxima

wavelengths: 588 nm / 604 nm

Applications

Tested Applications:

IF-P

Isotype

Cited Applications:

IF

Species Specificity: human, mouse, rat Cited Species: human

Positive Controls:

IF-P: mouse brain tissue,

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. The antibody is conjugated with CL594, Ex/Em 593 nm/614 nm.

Notable Publications

Author	Pubmed ID	Journal	Application
Xiang Hu	32512510	EBioMedicine	IF

Storage

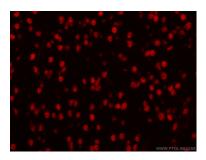
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

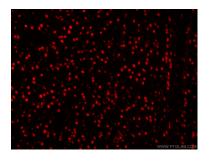
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using CL594-60082 (DACH1 antibody) at dilution of 1:50.



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