For Research Use Only

DAB2 Polyclonal antibody

Catalog Number:10109-2-AP Featured Product 8 Publications

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Basic Information

Catalog Number:
10109-2-AP

Size:
150ul , Concentration: 600 ug/ml by Nanodrop and 367 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0162

GenBank Accession Number:
BC003064

GeneID (NCBI):
1601

UNIPROT ID:
P98082

Full Name:
disabled homolog 2, mitogen-responsive phosphoprotein (Drosophila)

Calculated MW:
82 kDa

Observed MW:
96 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:6000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF/ICC 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:
WB, IHC, IF, IP

Species Specificity:
human

Cited Species:
human, chicken

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 : HeLa cells, MCF-7 cells

IP : HeLa cells,

IHC : human kidney tissue,

IF/ICC : HeLa cells,

Background Information

DAB2 is a protein of 770 amino acid residues with a predicted molecular weight of 85.5kDa. This gene was initially named DOC2 (for Differentially expressed in Ovarian Cancer) and is distinct from the DOC2A and DOC2B genes (for double C2-like domains, alpha and beta). Human DAB2 has an overall 83% identify with the mouse p96 protein, a putative mitogen-responsive phosphoprotein; homology is strongest in the amino-terminal end of the protein in a region corresponding to the phosphotyrosine interaction domain (PID), and contains multiple SH3 binding motifs. Chromosomal localization by FISH showed that the DAB2 gene is located on 5p13. The expression of DAB2 is down-regulated or absent in all the carcinoma cell lines examined, including prostate and ovarian carcinoma cell lines. The N-terminal domain of DAB2 interacts with Dishevelled-3 (Dvl-3), a signaling mediator of the Wnt pathway. Ectopic expression of DAB2 attenuates canonical Wnt/catenin-mediated signaling, including accumulation of catenin and cyclin D1 induction. DAB2 suppresses both protein kinase C and peptide growth factor-elicited signal pathways via the Ras-mitogen-activated protein kinase pathway. The proline-rich domain of DAB2 also interacts with proteins containing SH3 domain, such as Src and Fgr. The binding of DAB2 to c-Src resultes in the inactivation of c-Src. All data suggest that DAB2 is a potent tumor suppressor in many cancer types.

Notable Publications

Author	Pubmed ID	Journal	Application
Minxia Zuo	36330072	J Diabetes Res	WB
Akira Honda	30061390	Proc Natl Acad Sci U S A	IP
María D Vazquez-Carretero	32617970	J Cell Physiol	IF

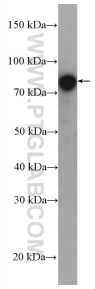
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

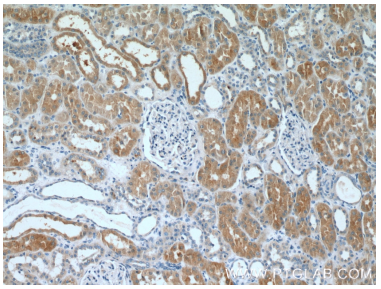
*** 20ul sizes contain 0.1% BSA

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

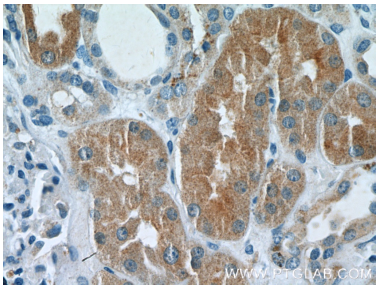
Selected Validation Data



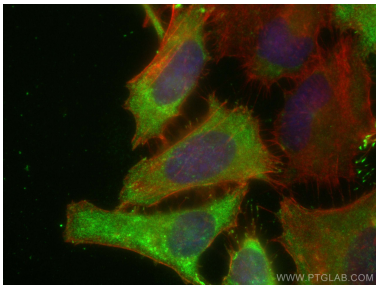
HeLa cells were subjected to SDS PAGE followed by western blot with 10109-2-AP (DAB2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



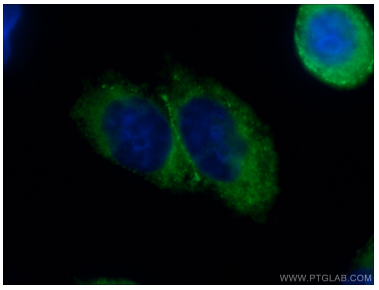
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 10109-2-AP (DAB2 Antibody) at dilution of 1:200 (under 10x lens).



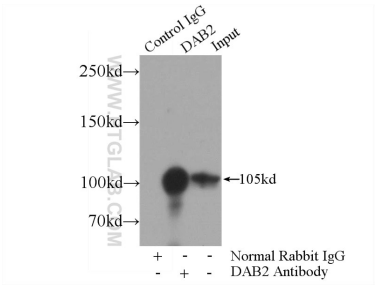
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 10109-2-AP (DAB2 Antibody) at dilution of 1:200 (under 40x lens).



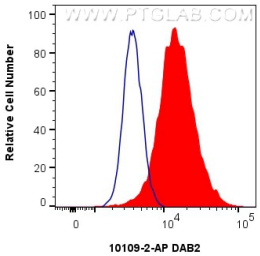
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using DAB2 antibody (10109-2-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using 10109-2-AP (DAB2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



IP result of anti-DAB2 (IP:10109-2-AP, 4ug; Detection:10109-2-AP 1:2000) with HeLa cells lysate 4000ug.



1x10^6 HeLa cells were intracellularly stained with 0.25 ug DAB2 Polyclonal antibody (10109-2-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).