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# anti-DAB1 antibody (C-Term)





Publication



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Overview	
Quantity:	25 μL
Target:	DAB1
Binding Specificity:	AA 400-555, C-Term
Reactivity:	Mouse, Rabbit
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This DAB1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Immunoprecipitation (IP)
Product Details	
Immunogen:	Immunogen: This whole rabbit serum was prepared by repeated immunizations with a synthetic peptide corresponding to the C-terminal region of murine Dab1 at amino acids 400-555.  Immunogen Type: Peptide
Cross-Reactivity:	Mouse (Murine)
Purification:	Dab-1 whole rabbit antiserum was prepared by delipidation and defibrination followed by the addition of buffer salts and preservative. This antibody is directed against Dab1 from mouse. Cross-reactivity with other species has not been determined. No reaction occurs with human or mouse Dab2.

## **Target Details**

Target:	DAB1
Alternative Name:	Dab1 (DAB1 Products)
Background:	Synonyms: rabbit anti-Dab 1 antibody, Disabled homolog 1 antibody, Disabled homolog 1
	Drosophila antibody, Scm antibody, Scr antibody, Scrambler antibody, Yot antibody, Yotari
	antibody
	Background: Anti-Dab1 Antibody recognizes Dab1 that is a phosphoprotein encoded by the
	mouse gene dab and is related to the Drosophila gene 'disabled'. Mutations in the mouse dab
	gene may result in the 'scrambler' and 'yotari' phenotypes. Dab1 binds to non-receptor tyrosine
	kinases and plays an important role in brain development. Dab1 is expressed in neuronal
	populations exposed to reelin, and it functions as a signaling molecule that regulates cell
	positioning in the developing brain. Cloning of human Dab1 and sequence determinations
	suggest a 96 % identity to the mouse sequence. Dab1 binds to cytoplasmic regions of very low
	density lipoprotein receptors (VLDLR), apolipoprotein E receptor-2 (ApoER2) and the Amyloid
	Precursor Protein (APP) family of proteins. Dab1 accumulates in ectopic neurons from mice
	lacking Reelin or both VLDLR and ApoER2. In humans, Dab1 has been mapped to lp32-p312.
	This region shows homology of synteny with the segment of mouse chromosome 4 containing
	Dab1.
	Gene Name: DAB1
Gene ID:	1600, 33350928
UniProt:	075553

### **Application Details**

Application Notes:

Immunohistochemistry Dilution: 1:5,000

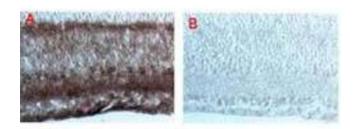
Application Note: Anti-Dab1 antibody is suitable for the detection of Dab1 by immunoprecipitation, immunohistochemistry and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at 80 kDa corresponding to Dab1 in the appropriate tissue extract or cell lysate. For western blotting block the blot using 5 % BLOTTO for 1 h at room temperature and followed by incubation with the primary antibody diluted in 1 % BLOTTO in TTBS for 1 h at room temperature. For immunoprecipitation use 1  $\mu$ L of antiserum per 500  $\mu$ g of brain lysate. Perform immunoprecipitation at 4 °C for 2 h. For immunoprecipitation buffer lysates with 50 mM Tris-Cl, pH 7.4, supplemented with 150 mM sodium chloride, 1 % (v/v) NP-40, 10  $\mu$ g/mL aprotinin and 10  $\mu$ g/mL leupeptin.

Immunoprecipitation Dilution: 1 µL per 500 µg

ELISA Dilution: 1:10,000 - 1:50,000

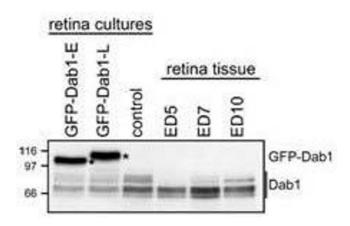
# **Application Details**

	Western Blot Dilution: 1:5,000
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 0.01 % (w/v) Sodium Azide Stabilizer: None
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 $\mu$ L). To minimize loss of volume dilute 1:10 by adding 225 $\mu$ L of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Publications	
Product cited in:	Katyal, Gao, Monckton, Glubrecht, Godbout: "Hierarchical disabled-1 tyrosine phosphorylation in Src family kinase activation and neurite formation." in: <b>Journal of molecular biology</b> , Vol. 368, Issue 2, pp. 349-64, (2007) (PubMed).



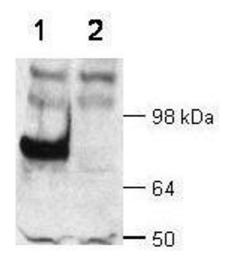
#### **Immunofluorescence**

**Image 1.** IF - Dab1 Antibody Immunohistochemical staining after cryofixation and sectioning of mouse brain tissue using (A) a 1:5,000 dilution of anti-Dab-1 and (B) 1:5,000 dilution of pre-immune serum followed by processing with HRP Goat anti-Rabbit IgG [H&L] and chromogenic substrate.



#### **Western Blotting**

Image 2. WB - Dab1 Antibody Analysis of GFP-Dab1 and endogenous Dab1 levels in transfected retinal cells and retinal tissue. Western blot analysis of whole cell lysates prepared from primary retinal cultures transfected with GFP-Dab1-E (lane 1), -L (lane 2), control untransfected retinal cultures (lane 3), and retinal tissue at ED5 (lane 4), ED7 (lane 5) and ED10 (lane 6). Proteins were electrophoresed through an SDS-8% polyacrylamide gel and transferred to nitrocellulose. The membrane was immunostained with Immunochemical's anti-Dab1 antibody, which recognizes both GFP-Dab1 (indicated by asterisks) and endogenous forms of Dab1 (indicated by a line). See Katval et al (2007) for additional details.



# **Western Blotting**

**Image 3.** WB - Dab1 Antibody Immunochemical's anti-Dab1 is shown to detect Dab1 present in wt mouse brain extracts (lane 1). No staining is noted in similar extracts from a dab knock-out mouse (lane 2). Detection of an 80 kDa band (arrowhead) occurs using a 1:5,000 dilution of the antibody in 1% milk in TTBS for 1 h at room temperature followed by a 1:5,000 dilution of HRP Goat-a-Rabbit with ECL visualization. Film exposure was ~1'. Other detection systems will yield similar results. Storage Conditions: Store

vial at -20° C prior to opening. For extended storage, aliquot contents and freeze at -20° C. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of opening.