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YWHAZ Antibody (D231)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8152b

Product Information

Application	IHC-P, WB, E
Primary Accession	P63104
Other Accession	P63102, P63101, Q5ZKC9, P63103
Reactivity	Human, Mouse
Predicted	Bovine, Chicken, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB4054
Calculated MW	27745
Antigen Region	216-245

Additional Information

Gene ID	7534
Other Names	14-3-3 protein zeta/delta, Protein kinase C inhibitor protein 1, KCIP-1, YWHAZ
Target/Specificity	This YWHAZ antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 216-245 amino acids from human YWHAZ.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	YWHAZ Antibody (D231) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	YWHAZ
Function	Adapter protein implicated in the regulation of a large spectrum of both general and specialized signaling pathways (PubMed:14578935, PubMed:15071501, PubMed:15644438, PubMed:16376338,

PubMed:16959763, PubMed:31024343, PubMed:9360956). Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif (PubMed:35662396). Binding generally results in the modulation of the activity of the binding partner (PubMed:35662396). Promotes cytosolic retention and inactivation of TFEB transcription factor by binding to phosphorylated TFEB (PubMed:35662396). Induces ARHGEF7 activity on RAC1 as well as lamellipodia and membrane ruffle formation (PubMed:16959763). In neurons, regulates spine maturation through the modulation of ARHGEF7 activity (By similarity).

Cellular Location Cytoplasm. Melanosome. Note=Located to stage I to stage IV melanosomes.

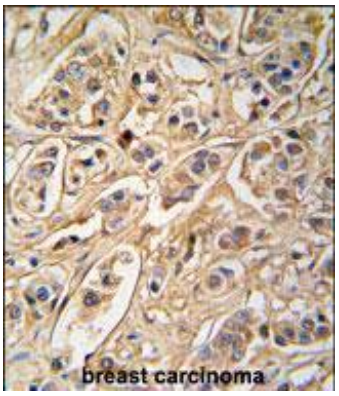
Background

YWHAZ belongs to the 14-3-3 family of proteins which mediate signal transduction by binding to phosphoserine-containing proteins. This highly conserved protein family is found in both plants and mammals, and this protein is 99% identical to the mouse, rat and sheep orthologs. The encoded protein interacts with IRS1 protein, suggesting a role in regulating insulin sensitivity. Two transcript variants differing in the 5' UTR, but encoding the same protein, have been identified for the gene. Both variants encode the same protein, however, they are differentially expressed in hematopoietic cells.

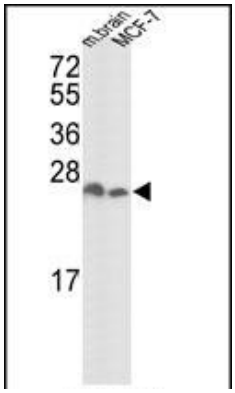
References

Powell, D.W., et al., Mol. Cell. Biol. 23(15):5376-5387 (2003).
Zhu, P., et al., Biochem. Biophys. Res. Commun. 301(4):991-999 (2003).
Li, Y., et al., J. Biol. Chem. 277(47):44593-44596 (2002).
Wang, H., et al., J. Clin. Endocrinol. Metab. 87(6):2629-2634 (2002).
Nellist, M., et al., J. Biol. Chem. 277(42):39417-39424 (2002).

Images



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with 14-3-3 protein zeta/delta antibody (C-term) (Cat. #AP8152b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Western blot analysis of hYWHAZ-D231 (Cat. #AP8152b) in mouse brain tissue and MCF-7 cell line lysates (35ug/lane). YWHAZ (arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.