10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

YWHAZ Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8152c

Product Information

Application	WB, IHC-P, FC, 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	RB22149
Calculated MW	27745
Antigen Region	65-93

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 65-93 amino acids from the Central region of human YWHAZ.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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 (Center) 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.

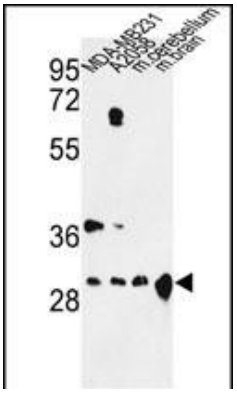
Background

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.

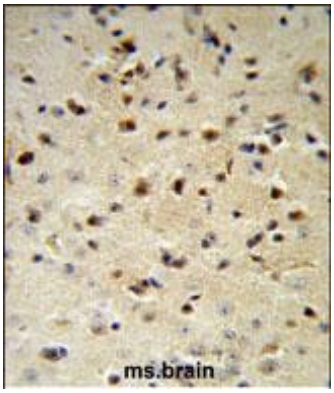
References

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).

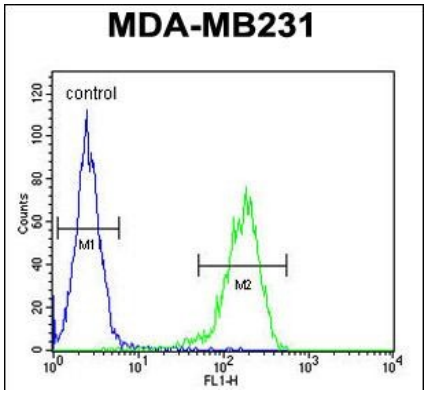
Images



Western blot analysis of YWHAZ Antibody (Center) (Cat. #AP8152c) in MDA-MB231, A2058 cell line and mouse cerebellum, brain tissue lysates (35ug/lane). YWHAZ (arrow) was detected using the purified Pab.



YWHAZ Antibody (Center) (Cat. #AP8152c) IHC analysis in formalin fixed and paraffin embedded mouse brain followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the YWHAZ Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



YWHAZ Antibody (Center) (Cat. #AP8152c) flow cytometric analysis of MDA-MB231 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Altered expression of microRNA-451 in eutopic endometrium of baboons (Papio anubis) with endometriosis.