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YWHAG Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5242

Product Information

Application	FC, IHC-P, WB
Primary Accession	P61981
Other Accession	Q6NRY9, Q6PCG0, Q6PC29, P61983, P61982, Q5F3W6, P68252
Reactivity	Mouse, Rat, Human
Predicted	Rat, Zebrafish, Bovine, Chicken, Xenopus
Host	Rabbit
Clonality	Polyclonal
Calculated MW	28303
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	7532
Antigen Region	63-92
Other Names	YWHAG; 14-3-3 protein gamma; Protein kinase C inhibitor protein 1; 14-3-3 protein gamma, N-terminally processed
Dilution	FC~~1:10~50 IHC-P~~1:100~500 WB~~1:1000
Target/Specificity	This YWHAG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 63-92 amino acids from the N-terminal region of human YWHAG.
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	YWHAG Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	YWHAG (HGNC:12852)
Function	Adapter protein implicated in the regulation of a large spectrum of both

	general and specialized signaling pathways (PubMed:15696159, PubMed:16511572, PubMed:36732624). Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif (PubMed:15696159, PubMed:16511572, PubMed:36732624). Binding generally results in the modulation of the activity of the binding partner (PubMed:16511572). Promotes inactivation of WDR24 component of the GATOR2 complex by binding to phosphorylated WDR24 (PubMed:36732624). Participates in the positive regulation of NMDA glutamate receptor activity by promoting the L- glutamate secretion through interaction with BEST1 (PubMed:29121962). Reduces keratinocyte intercellular adhesion, via interacting with PKP1 and sequestering it in the cytoplasm, thereby reducing its incorporation into desmosomes (PubMed:29678907). Plays a role in mitochondrial protein catabolic process (also named MALM) that promotes the degradation of damaged proteins inside mitochondria (PubMed:22532927).
Cellular Location	Cytoplasm, cytosol. Mitochondrion matrix. Note=Translocates to the mitochondrial matrix following induction of MALM (mitochondrial protein catabolic process).
Tissue Location	Highly expressed in brain, skeletal muscle, and heart.

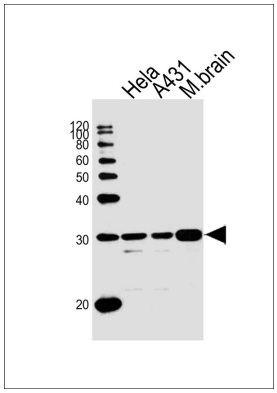
Background

YWHAG 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 100% identical to the rat ortholog. It is induced by growth factors in human vascular smooth muscle cells, and is also highly expressed in skeletal and heart muscles, suggesting an important role for this protein in muscle tissue. It has been shown to interact with RAF1 and protein kinase C, proteins involved in various signal transduction pathways.

References

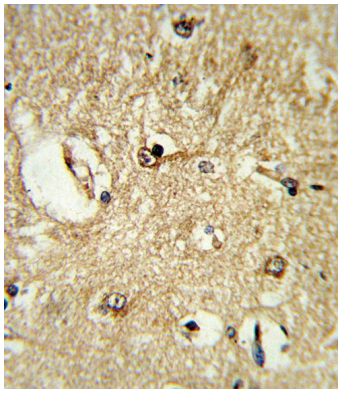
Jagemann,L.R., et.al., J. Biol. Chem. 283 (25), 17450-17462 (2008)

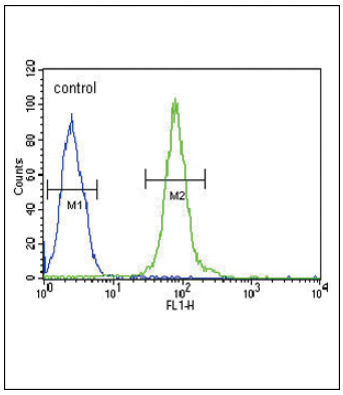
Images



Western blot analysis of lysates from Hela,A431 cell line,mouse brain tissue lysate(from left to right), using YWHAG Antibody (N-term)(Cat. #AW5242). AW5242 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

Formalin-fixed and paraffin-embedded human brain tissue reacted with YWHAG Antibody (N-term), 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.





YWHAG Antibody (N-term) (Cat. #AW5242) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.