

**YWHAG Antibody (N-term) [Knockout Validated]  
Affinity Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AW5704****Specification**

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**YWHAG Antibody (N-term) [Knockout Validated] - Product Information**

Application	WB, IHC-P, FC,E
Primary Accession	<a href="#">P61981</a>
Other Accession	<a href="#">Q6NRY9</a> , <a href="#">Q6PCG0</a> , <a href="#">Q6PC29</a> , <a href="#">P61983</a> , <a href="#">P61982</a> , <a href="#">Q5F3W6</a> , <a href="#">P68252</a>
Reactivity	Human, Mouse, Rat
Predicted	Zebrafish, Chicken, Bovine, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Source	HUMAN

**YWHAG Antibody (N-term) [Knockout Validated] - Additional Information****Gene ID** 7532**Antigen Region**  
63-92**Other Names**

14-3-3 protein gamma, Protein kinase C inhibitor protein 1, KCIP-1, 14-3-3 protein gamma, N-terminally processed, YWHAG

**Dilution**WB~~1:500-1:2000  
IHC-P~~1:10~50  
FC~~1:10~50**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) [Knockout Validated] is for research use only and not for use in diagnostic or therapeutic procedures.

## YWHAG Antibody (N-term) [Knockout Validated] - 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:<a href="http://www.uniprot.org/citations/15696159" target="\_blank">15696159</a>, PubMed:<a href="http://www.uniprot.org/citations/16511572" target="\_blank">16511572</a>, PubMed:<a href="http://www.uniprot.org/citations/36732624" target="\_blank">36732624</a>). Binds to a large number of partners, usually by recognition of a phosphoserine or phosphothreonine motif (PubMed:<a href="http://www.uniprot.org/citations/15696159" target="\_blank">15696159</a>, PubMed:<a href="http://www.uniprot.org/citations/16511572" target="\_blank">16511572</a>, PubMed:<a href="http://www.uniprot.org/citations/36732624" target="\_blank">36732624</a>). Binding generally results in the modulation of the activity of the binding partner (PubMed:<a href="http://www.uniprot.org/citations/16511572" target="\_blank">16511572</a>). Promotes inactivation of WDR24 component of the GATOR2 complex by binding to phosphorylated WDR24 (PubMed:<a href="http://www.uniprot.org/citations/36732624" target="\_blank">36732624</a>). Participates in the positive regulation of NMDA glutamate receptor activity by promoting the L-glutamate secretion through interaction with BEST1 (PubMed:<a href="http://www.uniprot.org/citations/29121962" target="\_blank">29121962</a>). Reduces keratinocyte intercellular adhesion, via interacting with PKP1 and sequestering it in the cytoplasm, thereby reducing its incorporation into desmosomes (PubMed:<a href="http://www.uniprot.org/citations/29678907" target="\_blank">29678907</a>). Plays a role in mitochondrial protein catabolic process (also named MALM) that promotes the degradation of damaged proteins inside mitochondria (PubMed:<a href="http://www.uniprot.org/citations/22532927" target="\_blank">22532927</a>).

### Cellular Location

Cytoplasm, cytosol. Mitochondrion matrix. Note=Translocates to the mitochondrial matrix following induction of MALM (mitochondrial protein catabolic process).

### Tissue Location

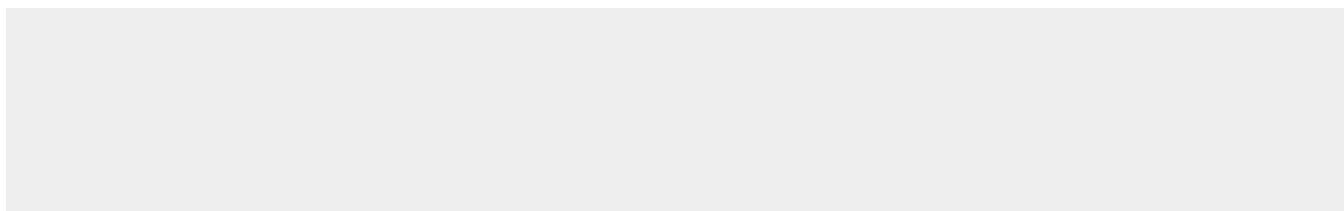
Highly expressed in brain, skeletal muscle, and heart.

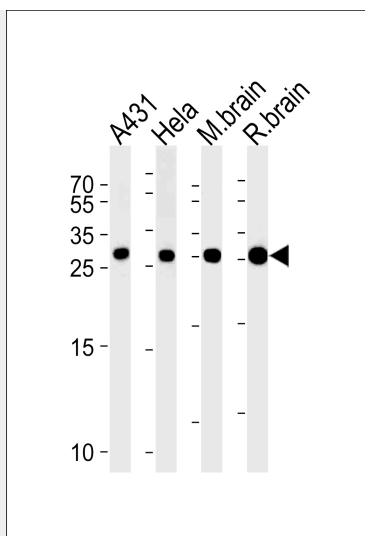
## YWHAG Antibody (N-term) [Knockout Validated] - Protocols

Provided below are standard protocols that you may find useful for product applications.

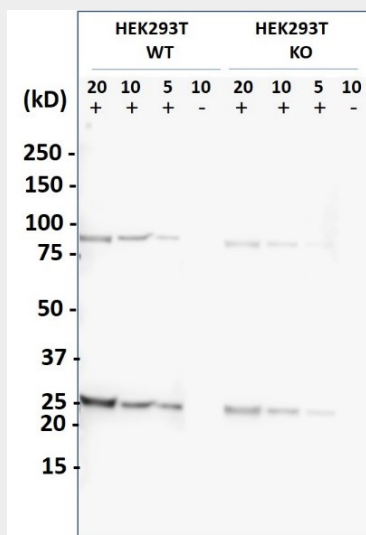
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## YWHAG Antibody (N-term) [Knockout Validated] - Images

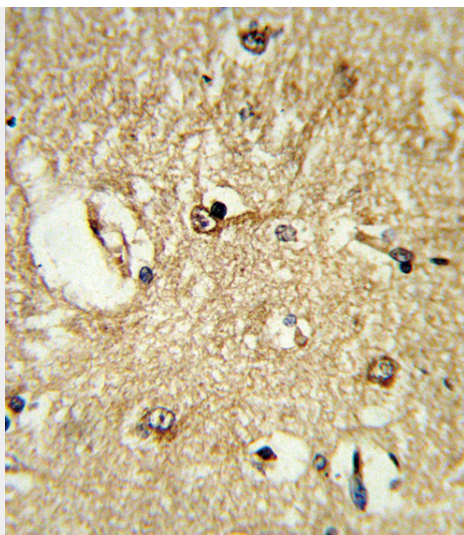




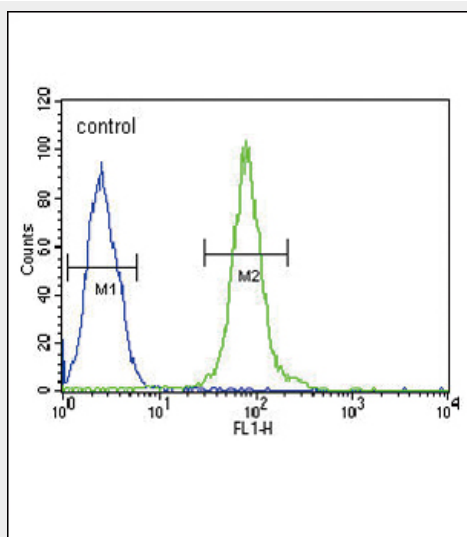
YWHAG Antibody (N-term) (Cat.# AP2943a) western blot analysis in A431,HeLa cell line,mouse brain and rat brain lysates (35ug/lane).This demonstrates the YWHAG antibody detected the YWHAG protein (arrow).



Predominant 28.7 kDa band for the HEK293T wild type lysate was observed at (3 ug/ml anti-YWAG) that matches the predicted size of 28.3 kDa. A less prominent 84.9 kDa band was also observed, which could be an aggregated/multimeric form of the target protein, a post-translationally modified form of the target protein, a splice-variant form of the target protein, or an unrelated protein which shares the antibody-reactive epitope. Significant reactivity were observed for bands at 28.3 and 84.9 kDa in the knock out lysate, suggesting incomplete knockout of the target gene.



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. #AP2943a) 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.

#### **YWHAG Antibody (N-term) [Knockout Validated] - 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.

#### **YWHAG Antibody (N-term) [Knockout Validated] - References**

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