

# WDR45 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP13313a

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">Q9Y484</a>
<b>Other Accession</b>	<a href="#">Q5U2Y0</a> , <a href="#">Q91VM3</a> , <a href="#">Q7ZUX3</a> , <a href="#">NP_009006.2</a> , <a href="#">NP_001025067.1</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Predicted</b>	Zebrafish, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB33311
<b>Calculated MW</b>	39868
<b>Antigen Region</b>	17-46

## Additional Information

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<b>Gene ID</b>	11152
<b>Other Names</b>	WD repeat domain phosphoinositide-interacting protein 4, WIPI-4, WD repeat-containing protein 45, WDR45, WDRX1, WDRXI4, WIPI4
<b>Target/Specificity</b>	This WDR45 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 17-46 amino acids from the N-terminal region of human WDR45.
<b>Dilution</b>	WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	WDR45 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	WDR45
<b>Synonyms</b>	WDRX1, WDRXI4, WIPI4

<b>Function</b>	Component of the autophagy machinery that controls the major intracellular degradation process by which cytoplasmic materials are packaged into autophagosomes and delivered to lysosomes for degradation (PubMed: <a href="#">23435086</a> , PubMed: <a href="#">28561066</a> ). Binds phosphatidylinositol 3-phosphate (PtdIns3P) (PubMed: <a href="#">28561066</a> ). Activated by the STK11/AMPK signaling pathway upon starvation, WDR45 is involved in autophagosome assembly downstream of WIPI2, regulating the size of forming autophagosomes (PubMed: <a href="#">28561066</a> ). Together with WIPI1, promotes ATG2 (ATG2A or ATG2B)-mediated lipid transfer by enhancing ATG2-association with phosphatidylinositol 3-monophosphate (PI3P)-containing membranes (PubMed: <a href="#">31271352</a> ). Probably recruited to membranes through its PtdIns3P activity (PubMed: <a href="#">28561066</a> ).
<b>Cellular Location</b>	Preautophagosomal structure. Cytoplasm. Note=Diffusely localized in the cytoplasm under nutrient-rich conditions. Localizes to autophagic structures during starvation-induced autophagy
<b>Tissue Location</b>	Ubiquitously expressed, with high expression in skeletal muscle and heart. Weakly expressed in liver and placenta Expression is down-regulated in pancreatic and in kidney tumors

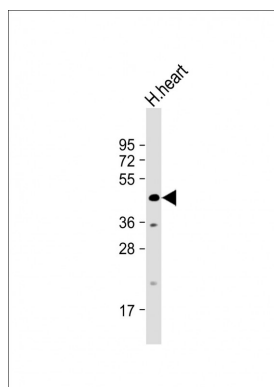
## Background

This gene encodes a member of the WD repeat protein family. WD repeats are minimally conserved regions of approximately 40 amino acids typically bracketed by gly-his and trp-asn (GH-WD), which may facilitate formation of heterotrimeric or multiprotein complexes. Members of this family are involved in a variety of cellular processes, including cell cycle progression, signal transduction, apoptosis, and gene regulation. This gene has a pseudogene at chromosome 4q31.3. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene, but the biological validity and full-length nature of some variants have not been determined.

## References

Proikas-Cezanne, T., et al. *Oncogene* 23(58):9314-9325(2004)  
Jeffries, T.R., et al. *Mol. Biol. Cell* 15(6):2652-2663(2004)  
Clark, A.G., et al. *Science* 302(5652):1960-1963(2003)

## Images



Anti-WDR45 Antibody (N-term) at 1:1000 dilution + human heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 40 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

## Citations

- [A comprehensive phenotypic characterization of a whole-body Wdr45 knock-out mouse](#)

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