

WDR45 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13313a**Specification**

WDR45 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	O9Y484
Other Accession	O5U2Y0 , O91VM3 , O7ZUX3 , NP_009006.2 , NP_001025067.1
Reactivity	Human
Predicted	Zebrafish, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	39868
Antigen Region	17-46

WDR45 Antibody (N-term) - Additional Information**Gene ID** 11152**Other Names**

WD repeat domain phosphoinositide-interacting protein 4, WIPI-4, WD repeat-containing protein 45, WDR45, WDRX1, WDRX14, WIPI4

Target/Specificity

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.

Dilution

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 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

WDR45 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

WDR45 Antibody (N-term) - Protein Information

Name WDR45**Synonyms** WDRX1, WDRX14, WIPI4

Function 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:[23435086](#), PubMed:[28561066](#)). Binds phosphatidylinositol 3- phosphate (PtdIns3P) (PubMed:[28561066](#)). 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:[28561066](#)). Together with WIPI1, promotes ATG2 (ATG2A or ATG2B)-mediated lipid transfer by enhancing ATG2-association with phosphatidylinositol 3-monophosphate (PI3P)-containing membranes (PubMed:[31271352](#)). Probably recruited to membranes through its PtdIns3P activity (PubMed:[28561066](#)).

Cellular Location

Preautophagosomal structure. Cytoplasm. Note=Diffusely localized in the cytoplasm under nutrient-rich conditions. Localizes to autophagic structures during starvation-induced autophagy

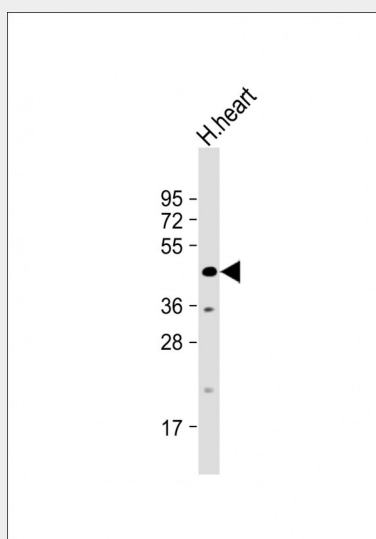
Tissue Location

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

WDR45 Antibody (N-term) - 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](#)

WDR45 Antibody (N-term) - 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.

WDR45 Antibody (N-term) - 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-aspartate (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.

WDR45 Antibody (N-term) - 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)

WDR45 Antibody (N-term) - Citations

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