

## WDR45 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13313a

#### **Specification**

# WDR45 Antibody (N-term) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O9Y484</u> <u>O5U2Y0, O91VM3, O7ZUX3, NP\_009006.2,</u> <u>NP\_001025067.1</u> Human Zebrafish, Mouse, Rat Rabbit Polyclonal Rabbit IgG 39868 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

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, WDRXI4, 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:<u>23435086</u>, PubMed:<u>28561066</u>). Binds phosphatidylinositol 3- phosphate (PtdIns3P) (PubMed:<u>28561066</u>). 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:<u>28561066</u>). Together with WIPI1, promotes ATG2 (ATG2A or ATG2B)-mediated lipid transfer by enhancing ATG2-association with phosphatidylinositol 3-monophosphate (PI3P)-containing membranes (PubMed:<u>31271352</u>). Probably recruited to membranes through its PtdIns3P activity (PubMed:<u>28561066</u>).

#### **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**

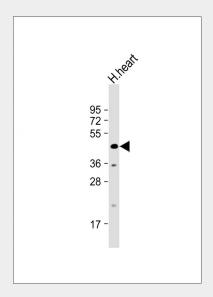
Ubiquitously expressed, with high expression in skeletal muscle and heart. Weakly expressed in liver and placenta Expression is down-regulated in pancreatic and in kidney tumors

## WDR45 Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## WDR45 Antibody (N-term) - Images



Anti-WDR45 Antibody (N-term) at 1:1000 dilution + human heart lysate Lysates/proteins at 20  $\mu$ g 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-asp (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)