

WDR45 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13313a

Specification

WDR45 Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q9Y484

Other Accession <u>Q5U2Y0</u>, <u>Q91VM3</u>, <u>Q7ZUX3</u>, <u>NP_009006.2</u>,

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

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: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

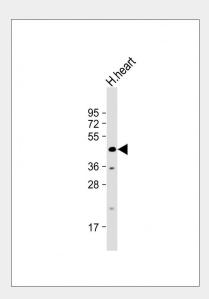
Ubiquitously expressed, with high expression in skeletal muscle and heart. Weakly expressed in liver and placenta Expression is down-regulated in pancreatic and in kidney tumors

WDR45 Antibody (N-term) - Protocols

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

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

WDR45 Antibody (N-term) - Images



Anti-WDR45 Antibody (N-term) at 1:1000 dilution + human heart lysate Lysates/proteins at 20 μ 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)