

**WDR45 Antibody (N-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13313a****Specification**

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**WDR45 Antibody (N-term) Blocking peptide - Product Information**Primary Accession [Q9Y484](#)**WDR45 Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 11152**Other Names**

WD repeat domain phosphoinositide-interacting protein 4, WIPI-4, WD repeat-containing protein 45, WDR45, WDRX1, WDRXI4, WIPI4

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP13313a was selected from the N-term region of WDR45. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**WDR45 Antibody (N-term) Blocking peptide - 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:<a href="http://www.uniprot.org/citations/23435086" target="\_blank">23435086</a>, PubMed:<a href="http://www.uniprot.org/citations/28561066" target="\_blank">28561066</a>). Binds phosphatidylinositol 3- phosphate (PtdIns3P) (PubMed:<a href="http://www.uniprot.org/citations/28561066" target="\_blank">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="http://www.uniprot.org/citations/28561066" target="\_blank">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="http://www.uniprot.org/citations/31271352" target="\_blank">31271352</a>). Probably recruited to membranes through its PtdIns3P activity (PubMed:<a href="http://www.uniprot.org/citations/28561066" target="\_blank">28561066</a>).

**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) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**WDR45 Antibody (N-term) Blocking peptide - Images****WDR45 Antibody (N-term) Blocking peptide - 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.

**WDR45 Antibody (N-term) Blocking peptide - 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)