

**WDFY3 antibody - middle region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI13239****Specification**

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**WDFY3 antibody - middle region - Product Information**

Application	WB
Primary Accession	<a href="#">O8IZO1</a>
Other Accession	<a href="#">NM_178583</a> , <a href="#">NP_848698</a>
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog
Predicted	Human, Mouse, Rat, Rabbit, Pig, Horse, Bovine, Guinea Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	90kDa KDa

**WDFY3 antibody - middle region - Additional Information****Gene ID** 23001**Alias Symbol** **ALFY, KIAA0993, MGC16461, ZFYVE25****Other Names**

WD repeat and FYVE domain-containing protein 3, Autophagy-linked FYVE protein, Alf, WDFY3, KIAA0993

**Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**

Add 50 ul of distilled water. Final anti-WDFY3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

**Precautions**

WDFY3 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

**WDFY3 antibody - middle region - Protein Information****Name** WDFY3**Synonyms** KIAA0993**Function**

Required for selective macroautophagy (aggrephagy). Acts as an adapter protein by linking specific proteins destined for degradation to the core autophagic machinery members, such as the ATG5- ATG12-ATG16L E3-like ligase, SQSTM1 and LC3 (PubMed:&lt;a href="http://www.uniprot.org/citations/20417604" target="\_blank"&gt;20417604&lt;/a&gt;). Along with

p62/SQSTM1, involved in the formation and autophagic degradation of cytoplasmic ubiquitin-containing inclusions (p62 bodies, ALIS/aggresome-like induced structures). Along with SQSTM1, required to recruit ubiquitinated proteins to PML bodies in the nucleus (PubMed:<a href="http://www.uniprot.org/citations/20168092" target="\_blank">20168092</a>). Important for normal brain development. Essential for the formation of axonal tracts throughout the brain and spinal cord, including the formation of the major forebrain commissures. Involved in the ability of neural cells to respond to guidance cues. Required for cortical neurons to respond to the trophic effects of netrin-1/NTN1 (By similarity). Regulates Wnt signaling through the removal of DVL3 aggregates, likely in an autophagy-dependent manner. This process may be important for the determination of brain size during embryonic development (PubMed:<a href="http://www.uniprot.org/citations/27008544" target="\_blank">27008544</a>). May regulate osteoclastogenesis by acting on the TNFSF11/RANKL - TRAF6 pathway (By similarity). After cytokinetic abscission, involved in midbody remnant degradation (PubMed:<a href="http://www.uniprot.org/citations/24128730" target="\_blank">24128730</a>). In vitro strongly binds to phosphatidylinositol 3-phosphate (PtdIns3P) (PubMed:<a href="http://www.uniprot.org/citations/15292400" target="\_blank">15292400</a>).

### Cellular Location

Nucleus membrane. Cytoplasm, cytosol. Nucleus, PML body. Membrane; Peripheral membrane protein; Cytoplasmic side Perikaryon {ECO:0000250|UniProtKB:Q6VNB8}. Cell projection, axon {ECO:0000250|UniProtKB:Q6VNB8}. Note=Relocalization from the nucleus to the cytosol is stimulated by cellular stress, such as starvation or proteasomal inhibition. In the cytosol of starved cells, colocalizes with autophagic structures (PubMed:15292400, PubMed:20168092, PubMed:20417604, PubMed:20971078). This redistribution is dependent on p62/SQSTM1 (PubMed:20168092). When nuclear export is blocked by treatment with leptomycin B, accumulates in nuclear bodies, that completely or partially colocalize with promyelocytic leukemia (PML) bodies (PubMed:20168092). Localizes throughout neurons, including within axons. In neurons, enriched in the light membrane fraction along with the synaptosomal membrane protein synaptophysin and the membrane- bound form of LC3/MAP1LC3A/MAP1LC3B, called LC3-II, a classic marker for autophagic vesicles (By similarity). {ECO:0000250|UniProtKB:Q6VNB8, ECO:0000269|PubMed:15292400, ECO:0000269|PubMed:20168092, ECO:0000269|PubMed:20417604, ECO:0000269|PubMed:20971078}

### Tissue Location

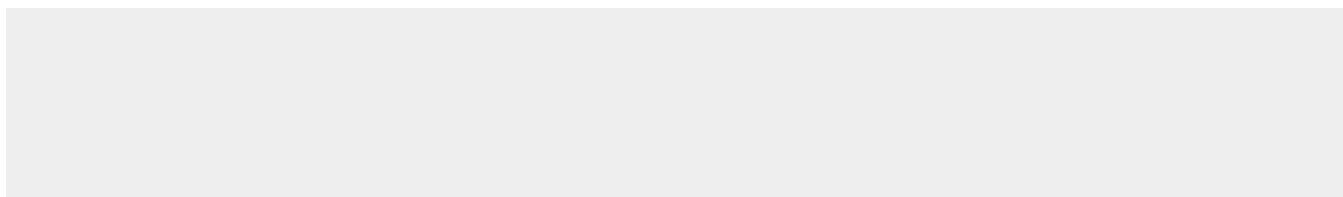
Expressed in osteoclast and their mononuclear precursors (at protein level).

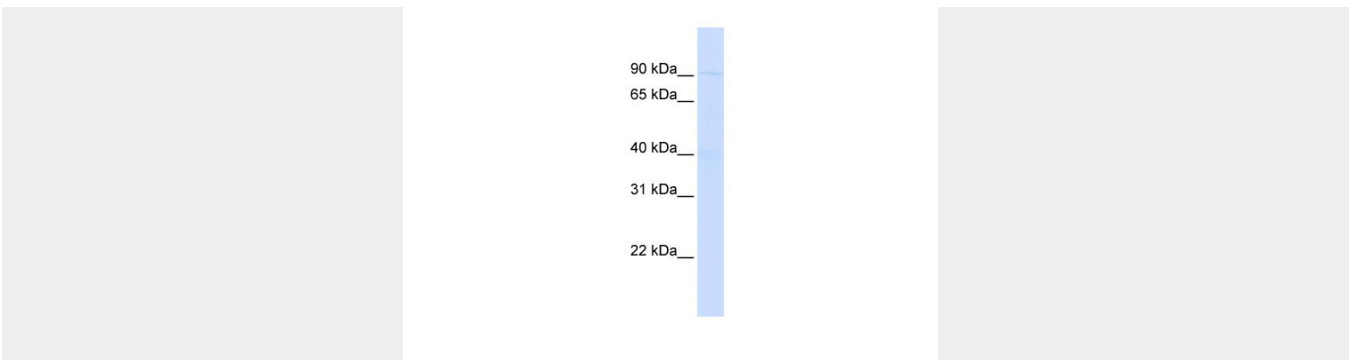
## WDFY3 antibody - middle region - Protocols

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](#)

## WDFY3 antibody - middle region - Images





90 kDa  
65 kDa  
40 kDa  
31 kDa  
22 kDa

WB Suggested Anti-WDFY3 Antibody Titration: 0.2-1  $\mu$ g/ml

ELISA Titer: 1:12500

Positive Control: Human Muscle

### **WDFY3 antibody - middle region - References**

Simonsen A.,et al.J. Cell Sci. 117:4239-4251(2004).

Hillier L.W.,et al.Nature 434:724-731(2005).

Nagase T.,et al.DNA Res. 6:63-70(1999).

Nakajima D.,et al.DNA Res. 9:99-106(2002).

Ota T.,et al.Nat. Genet. 36:40-45(2004).