

WAPL Antibody
Catalog # ASC11802**Specification**

WAPL Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	Q7Z5K2
Other Accession	NP_055860 , 42734325
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 131 kDa

Application Notes	Observed: 140 kDa KDa WAPL antibody can be used for detection of WAPL by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunohistochemistry at 5 µg/mL. For Immunofluorescence start at 20 µg/mL.
-------------------	--

WAPL Antibody - Additional Information

Gene ID **23063**

Target/Specificity

WAPAL; WAPL antibody is human, mouse and rat reactive. At least four isoforms of WAPL are known to exist.

Reconstitution & Storage

WAPL antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

WAPL Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

WAPL Antibody - Protein Information

Name WAPL ([HGNC:23293](#))

Synonyms FOE, KIAA0261, WAPAL

Function

Regulator of sister chromatid cohesion in mitosis which negatively regulates cohesin association with chromatin (PubMed:26299517). Involved in both sister chromatid cohesion during interphase and sister-chromatid resolution during early stages of mitosis. Couples DNA replication to sister chromatid cohesion. Cohesion ensures that chromosome partitioning is accurate in both meiotic and mitotic cells and plays an important role in DNA repair.

Cellular Location

[Isoform 2]: Nucleus.

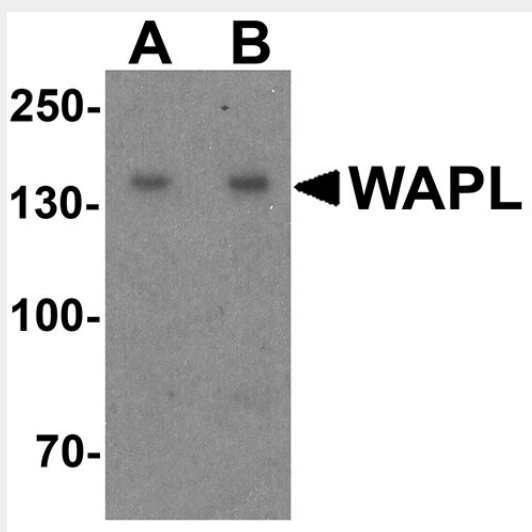
Tissue Location

Isoform 1 is highly expressed in uterine cervix tumor. Isoform 2 is widely expressed with a high level in skeletal muscle and heart.

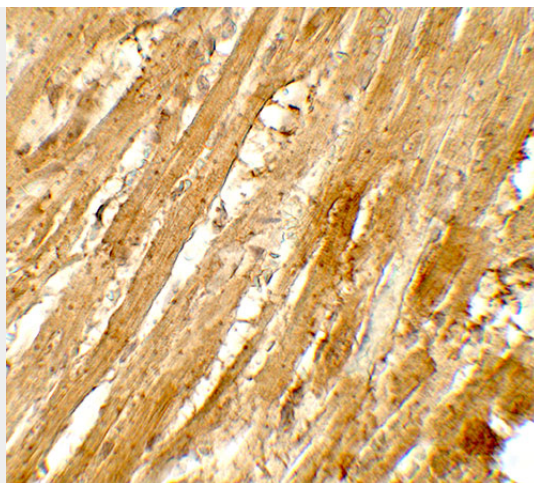
WAPL Antibody - Protocols

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

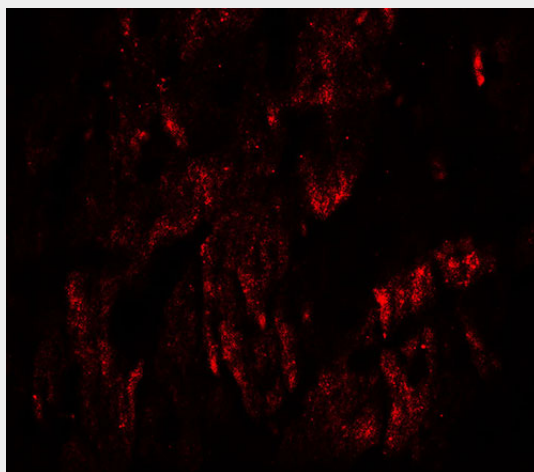
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

WAPL Antibody - Images

Western blot analysis of WAPL in A20 cell lysate with WAPL antibody at (A) 1 and (B) 2 μ g/ml.



Immunohistochemistry of WAPL in rat heart tissue with WAPL antibody at 5 µg/mL.



Immunofluorescence of WAPL in rat heart tissue with WAPL antibody at 20 µg/mL.

WAPL Antibody - Background

WAPL (wings apart-like), also known as WAPAL or FOE, is a 1,190 amino acid protein that contains one WAPL domain and may play an important role in cell growth (1). It is expressed in an isoform dependent manner in heart, skeletal muscle (isoform 2) and uterine cervix tumor tissue (isoform 1) (1,2,4). WAPL is involved in sister-chromatid adhesion and promotes release of cohesin from chromosomes by directly interacting with its regulatory subunits (3,4). WAPL is a new regulator of the development and metastasis of cancerous tissue (4,5).

WAPL Antibody - References

Kwiatkowski BA, Ragoczy T, Ehly J, et al. Identification and cloning of a novel chromatin-associated protein partner of Epstein-Barr nuclear protein 2. *Exp. Cell Res.* 2004; 300:223-33.
Kueng S, Hegemann B, Peters BH, et al. Wapl controls the dynamic association of cohesion with chromatin. *Cell* 2006; 127:955-67.
Gandhi R, Gillespie PJ, and Hirano T. Human Wapl is a cohesin-binding protein that promotes sister-chromatid resolution in mitotic prophase. *Curr. Biol.* 2006; 16:2406-17.
Oikawa K, Ohbayashi T, Kiyono T, et al. Expression of a novel human gene, human wings apart-like (hWAPL), is associated with cervical carcinogenesis and tumor progression. *Cancer Res.* 2004; 64:3545-9.