

WAPL (A-17): sc-82118

BACKGROUND

WAPL (wings apart-like), also known as WAPAL or FOE, is a 1,190 amino acid protein that contains one WAPL domain and is expressed as 2 alternatively spliced isoforms, one of which localizes to the nucleus. Expressed in an isoform-dependent manner in heart, skeletal muscle and uterine cervix tumor tissue, WAPL is involved in sister-chromatid adhesion and overall cell growth, specifically playing a role in the development and metastasis of cancerous tissue. The gene encoding WAPL maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

1. Oikawa, K., et al. 2004. Expression of a novel human gene, human wings apart-like (hWAPL), is associated with cervical carcinogenesis and tumor progression. *Cancer Res.* 64: 3545-3549.
2. Kwiatkowski, B.A., et al. 2004. Identification and cloning of a novel chromatin-associated protein partner of Epstein-Barr nuclear protein 2. *Exp. Cell Res.* 300: 223-233.
3. Kuroda, M., et al. 2005. A dioxin sensitive gene, mammalian WAPL, is implicated in spermatogenesis. *FEBS Lett.* 579: 167-172.
4. Kueng, S., et al. 2006. Wapl controls the dynamic association of cohesin with chromatin. *Cell* 127: 955-967.
5. Gandhi, R., et al. 2006. Human Wapl is a cohesin-binding protein that promotes sister-chromatid resolution in mitotic prophase. *Curr. Biol.* 16: 2406-2417.
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CHROMOSOMAL LOCATION

Genetic locus: WAPAL (human) mapping to 10q23.2; Wapl (mouse) mapping to 14 B.

SOURCE

WAPL (A-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WAPL of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82118 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

WAPL (A-17) is recommended for detection of WAPL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

WAPL (A-17) is also recommended for detection of WAPL in additional species, including equine, canine, bovine and porcine.

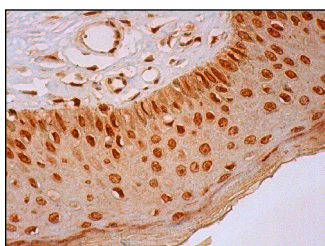
Suitable for use as control antibody for WAPL siRNA (h): sc-76910, WAPL siRNA (m): sc-76911, WAPL shRNA Plasmid (h): sc-76910-SH, WAPL shRNA Plasmid (m): sc-76911-SH, WAPL shRNA (h) Lentiviral Particles: sc-76910-V and WAPL shRNA (m) Lentiviral Particles: sc-76911-V.

Molecular Weight of WAPL: 140 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Biotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



WAPL (A-17): sc-82118. Immunoperoxidase staining of formalin fixed, paraffin-embedded human vulva/anal skin tissue showing nuclear and cytoplasmic staining of epidermal cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.