WTAP (G-20): sc-55440



The Power to Question

BACKGROUND

Wilms' tumor (WT) is an embryonal malignancy of the kidney that affects 1 in 10,000 infants and is observed in both sporadic and inherited forms. The Wilms' tumor protein (WT1) binds the DNA sequence GCGGGGCG, a recognition element common to the early growth response (Egr) family of $\rm Zn^{2+}$ finger transcriptional activators, and functions as a transcriptional repressor. WTAP (Wilms' tumor 1-associating protein) is a ubiquitously expressed nuclear protein that interacts with WT1 and may be involved in regulating mRNA splicing. WTAP is found in nuclear speckles where it regulates the $\rm G_2/M$ cell cycle transition by binding to the 3' UTR of cyclin A2, thus enhancing its stability. Additionally, WTAP inhibits expression of WT1 target genes and is able to impair the ability of WT1 to bind DNA. Two isoforms of WTAP exist due to alternative splicing events.

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CHROMOSOMAL LOCATION

Genetic locus: WTAP (human) mapping to 6q25.3; Wtap (mouse) mapping to 17 A1.

SOURCE

WTAP (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WTAP 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-55440 P, ($100 \mu g$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

WTAP (G-20) is recommended for detection of WTAP 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

WTAP (G-20) is also recommended for detection of WTAP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for WTAP siRNA (h): sc-63224, WTAP siRNA (m): sc-63225, WTAP shRNA Plasmid (h): sc-63224-SH, WTAP shRNA Plasmid (m): sc-63225-SH, WTAP shRNA (h) Lentiviral Particles: sc-63224-V and WTAP shRNA (m) Lentiviral Particles: sc-63225-V.

Molecular Weight of WTAP: 47 kDa.

Positive Controls: K-562 nuclear extract: sc-2130 or Jurkat nuclear extract: sc-2132.

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 Blotto 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) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

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

RESEARCH USE

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



Try WTAP (D-7): sc-374280 or WTAP (C-12): sc-166931, our highly recommended monoclonal alternatives to WTAP (G-20).

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