SANTA CRUZ BIOTECHNOLOGY, INC.

Ciao 1 (C-20): sc-8368



BACKGROUND

The Wilms tumor suppressor protein, WT1, contains a zinc finger domain and is capable of both activating or repressing transcription, depending on cell type and promotor context. A number of proteins, including various tumor suppressors, have been shown to interact with WT1. Interaction of WT1 with p53 results in increased p53 stability, and inhibits the ability of p53 to induce apoptosis. Par-4, a transcriptional repressor, is also known to bind WT1. Ciao 1, a member of the WD40 family of proteins, specifically interacts with WT1, resulting in a decrease in WT1 mediated transcriptional activation. Ciao 1 does not inhibit binding by causing a conformational change or by interfering with the activation domain of WT1.

REFERENCES

- Maheswaran, S., Englert, C., Bennett, P., Heinrich, G. and Haber, D.A. 1995. The WT1 gene product stabilizes p53 and inhibits p53-mediated apoptosis. Genes Dev. 9: 2143-2156.
- Johnstone, R.W., See, R.H., Sells, S.F., Wang, J., Muthukkumar, S., Englert, C., Haber, D.A., Licht, J.D., Sugrue, S.P., Roberts, T., Rangnekar, V.M. and Shi, Y. 1996. A novel repressor, Par-4, modulates transcription and growth suppression functions of the Wilms' tumor suppressor WT1. Mol. Cell. Biol. 16: 6945-6956.
- Johnstone, R.W., Wang, J., Tommerup, N., Vissing, H., Roberts, T. and Shi, Y. 1998. Ciao 1 is a novel WD40 protein that interacts with the tumor suppressor protein WT1. J. Biol. Chem. 273: 10880-10887.
- 4. Menke, A.L., van der Eb, A.J. and Jochemsen, A.G. 1998. The Wilms' tumor 1 gene: oncogene or tumor suppressor gene? Int. Rev. Cytol. 181: 151-212.

CHROMOSOMAL LOATION

Genetic locus: WDR39 (human) mapping to 2q11.2.

SOURCE

Ciao 1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Ciao 1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-8368 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

Ciao 1 (C-20) is recommended for detection of Ciao 1 of 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).

Ciao 1 (C-20) is also recommended for detection of Ciao 1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Ciao 1 siRNA (h): sc-40396, Ciao 1 shRNA Plasmid (h): sc-40396-SH and Ciao 1 shRNA (h) Lentiviral Particles: sc-40396-V.

Molecular Weight of Ciao 1: 38 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 Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: 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.

RESEARCH USE

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