## 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

1. Maheswaran, S., et al. 1995. The WT1 gene product stabilizes p53 and inhibits p53-mediated apoptosis. Genes Dev. 9: 2143-2156.
2. Johnstone, R.W., et al. 1996. A novel repressor, Par-4, modulates transcription and growth suppression functions of the Wilms' tumor suppressor WT1. Mol. Cell. Biol. 16: 6945-6956.
3. Johnstone, R.W., et al. 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., et al. 1998. The Wilms' tumor 1 gene: oncogene or tumor suppressor gene. Int. Rev. Cytol. 181: 151-212.

## CHROMOSOMAL LOCATION

Genetic locus: CIA01 (human) mapping to 2q11.2; Ciao1 (mouse) mapping to 2 F 1 .

## SOURCE

Ciao 1 (C-4) is a mouse monoclonal antibody raised against amino acids 1-339 of Ciao 1 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{~g} \lg \mathrm{G}_{2 \mathrm{a}}$ kappa light chain in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.

## APPLICATIONS

Ciao 1 (C-4) is recommended for detection of Ciao 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:1001:1000), immunoprecipitation [1-2 $\mu \mathrm{g}$ per $100-500 \mu \mathrm{~g}$ of total protein ( 1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:501:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:301:3000).

Suitable for use as control antibody for Ciao 1 siRNA (h): sc-40396, Ciao 1 siRNA (m): sc-40397, Ciao 1 shRNA Plasmid (h): sc-40396-SH, Ciao 1 shRNA Plasmid (m): sc-40397-SH, Ciao 1 shRNA (h) Lentiviral Particles: sc-40396-V and Ciao 1 shRNA (m) Lentiviral Particles: sc-40397-V.

Molecular Weight of Ciao 1: 38 kDa .
Positive Controls: A2058 whole cell lysate: sc-364178, HL-60 whole cell lysate: sc-2209 or Ciao 1 (h): 293T Lysate: sc-115146.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGк BP-HRP: sc-516102 or m-lgGк BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz ${ }^{\circledR}$ Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 ( 0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgGк BP-FITC: sc-516140 or m-lgGк BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz ${ }^{\circledR}$ Mounting Medium: sc-24941 or UltraCruz ${ }^{\circledR}$ Hard-set Mounting Medium: sc-359850.

## DATA



Ciao 1 (C-4): sc-374499. Western blot analysis of Ciao 1 expression in A2058 (A), HL-60 (B), MDA-MB-435S (C) and $\mathrm{NIH} / 3 \mathrm{~T} 3$ (D) whole cell lysates


Ciao 1 (C-4): sc-374499. Western blot analysis of Ciao 1 expression in non-transfected: sc-117752 (A) and human Ciao 1 transfected: sc-115146 (B) 293 T whole cell lysates.

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ 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.

## PROTOCOLS

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

