SANTA CRUZ BIOTECHNOLOGY, INC.

Ciao 1 (H-339): sc-8322

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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., 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.
2. 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.
3. 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.

SOURCE

Ciao 1 (H-339) is a rabbit polyclonal antibody raised against amino acids 1-339 representing full length Ciao 1 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.

RESEARCH USE

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

APPLICATIONS

Ciao 1 (H-339) is recommended for detection of Ciao 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 (H-339) is also recommended for detection of Ciao 1 in additional species, including equine, canine and bovine.

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.

Positive Controls: Ciao1 (1-339): sc-4444 WB.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/ 2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Fink, S.P., Mikkola, D., Willson, J.K. and Markowitz, S. 2003. TGF-β-induced nuclear localization of Smad2 and Smad3 in Smad4 null cancer cell lines. Oncogene 22: 1317-1323.

STORAGE

Store at 4° C, **DO 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.