SANTA CRUZ BIOTECHNOLOGY, INC.

WIP (L-15): sc-23027

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Mutations in the Wiskott-Aldrich syndrome protein (WASP) often result in immunodeficiency due to abnormal T cell and B cell activation. The 503 amino acid WAS-interacting protein (WIP) contains a number of domains implicated in actin-binding and several putative src homology-binding domains. The first 100 amino acids of WASP interact with amino acids 377-503 of WIP, and the majority of pathogenic mutations associated with WAS occur within the first 100 amino acids of WASP. The gene encoding human WIP maps to chromosome 2p23.3-q24.3. Overexpression of WIP in the human B cell line BJAB increases F-actin content and cerebriform projections. While both WIP and Vav cooperate in the regulation of NF-AT/AP-1 gene transcription, the WIP-WASP complex is required for activation of NF-AT/AP-1 necessary for proper T cell function. A dysfunctional WIP-WASP complex may be implicated in the immunodeficient phenotype in WAS.

REFERENCES

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3. Ramesh, N., Anton, I.M., Hartwig, J.H., Geha, R.S. 1997. WIP, a protein associated with Wiskott-Aldrich syndrome protein, induces actin polymerization and redistribution in lymphoid cells. Proc. Natl. Acad. Sci. USA 94: 14671-14676.
4. Schwarz, K., Nonoyama, S., Peitsch, M., de Saint Basile, G., Espanol, T., Fasth, A., Fischer, A., Freitag, K., Friedrcih, W. and Fugmann, S. 1996. WASPbase: a database of WAS- and XLT-causing mutations. Immunol. Today 17: 496-502.
5. Derry, J.M., Ochs, H.D. and Francke, U. 1994. isolation of a novel gene mutated in Wiskott-Aldrich syndrome. Cell 78: 635-644.
6. Cooper, M.D., Chase, H.P., Lowman, J.T., Krivit, W. and Good, R.A. 1968. Am. J. Med. 44: 499-513.

SOURCE

WIP (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of WIP 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-23027 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

WIP (L-15) is recommended for detection of WIP 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).

Suitable for use as control antibody for WIP siRNA (h): sc-37183, WIP siRNA (m): sc-37184, WIP shRNA Plasmid (h): sc-37183-SH, WIP shRNA Plasmid (m): sc-37184-SH, WIP shRNA (h) Lentiviral Particles: sc-37183-V and WIP shRNA (m) Lentiviral Particles: sc-37184-V.

Molecular Weight of WIP: 55 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207.

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) 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.

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **WIP (C-1): sc-390099** or **WIP (E-9): sc-271114**, our highly recommended monoclonal aternatives to WIP (L-15).