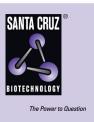
# SANTA CRUZ BIOTECHNOLOGY, INC.

# WIP (L-15): sc-23027



# 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

- Savoy, D.N., Billadeau, D.D. and Leibson, P.J. 2000. Cutting Edge: WIP, a Binding Partner for Wiskott-Aldrich Syndrome Protein, Cooperates with Vav in the Regulation of T Cell Activation. J. Immunol. 164: 2866-2870.
- Stewart, D.M., Tian, L. and Nelson, D.L. 1999. Mutations That Cause the Wiskott-Aldrich Syndrome Impair the Interaction of Wiskott-Aldrich Syndrome Protein (WASP) with WASP Interacting Protien. J. Immunol. 162: 5019-5024.
- 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.
- 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.
- Derry, J.M., Ochs, H.D. and Francke, U. 1994. isolation of a novel gene mutated in Wiskott-Aldrich syndrome. Cell 78: 635-644.
- 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  $\mu g$  lgG 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  $\mu$ 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.

## 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) 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.

#### **PROTOCOLS**

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

# MONOS Satisfation Guaranteed

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