# SANTA CRUZ BIOTECHNOLOGY, INC.

# WIP (G-20): sc-16882



## 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 2q31.1. 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.

## CHROMOSOMAL LOCATION

Genetic locus: WIPF1 (human) mapping to 2q31.1; Wipf1 (mouse) mapping to 2 C3.

### SOURCE

WIP (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of WIP of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-16882 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 (G-20) 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), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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.

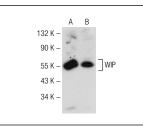
Molecular Weight of WIP: 55 kDa.

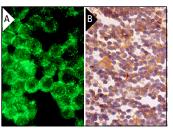
Positive Controls: HL-60 whole cell lysate: sc-2209 or BJAB whole cell lysate: sc-2207.

#### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immuno-histochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

# DATA





WIP (G-20): sc-16882. Western blot analysis of WIP expression in BJAB (**A**) and HL-60 (**B**) whole cell lysates.

WIP (G-20): sc-16882. Immunofluorescence staining of methanol-fixed BJAB cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing cytoplasmic staining of Iymphoid cells (B).

# SELECT PRODUCT CITATIONS

- Le Page, Y., Demay, F. and Salbert, G. 2004. A neural-specific splicing event generates an active form of the Wiskott-Aldrich syndrome protein. EMBO Rep. 5: 895-900.
- Konno, A., Kirby, M., Anderson, S.A., Schwartzberg, P.L. and Candotti, F. 2007. The expression of Wiskott-Aldrich syndrome protein (WASP) is dependent on WASP-interacting protein (WIP). Int. Immunol. 19: 185-192.

#### **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 (G-20).