# SANTA CRUZ BIOTECHNOLOGY, INC.

# GIOT-2 (3421C3a): sc-81143



## BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. GIOT-2 (gonadotropin-inducible transcription repressor 2), also known as ZNF44 or KOX7, is a 589 amino acid member of the Krüppel C<sub>2</sub>H<sub>2</sub>-type zinc-finger family of proteins. A nuclear protein, GIOT-2 is thought to be involved in transcriptional regulation, possibly repressing Gonadotropin gene expression. GIOT-2 contains 16  $C_2H_2$ -type zinc fingers and one KRAB domain.

## REFERENCES

- Bray, P., et al. 1991. Characterization and mapping of human genes encoding zinc finger proteins. Proc. Natl. Acad. Sci. USA 88: 9563-9567.
- 2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 194542. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Li, Z., et al. 2005. Discrimination of vanadium from zinc using gene profiling in human bronchial epithelial cells. Environ. Health Perspect. 113: 1747-1754.
- 4. Narayanan, B.A. 2006. Chemopreventive agents alters global gene expression pattern: predicting their mode of action and targets. Curr. Cancer Drug Targets 6: 711-727.
- 5. Olsen, J.V., et al. 2006. Global, *in vivo*, and site-specific phosphorylation dynamics in signaling networks. Cell 127: 635-648.

## CHROMOSOMAL LOCATION

Genetic locus: ZNF44 (human) mapping to 19p13.2.

## SOURCE

GIOT-2 (3421C3a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to an internal region of GIOT-2 of human origin.

#### PRODUCT

Each vial contains 100  $\mu$ g lgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

### **APPLICATIONS**

GIOT-2 (3421C3a) is recommended for detection of GIOT-2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for GIOT-2 siRNA (h): sc-97643, GIOT-2 shRNA Plasmid (h): sc-97643-SH and GIOT-2 shRNA (h) Lentiviral Particles: sc-97643-V.

Molecular Weight of GIOT-2 isoforms 1/2/3: 77/68/73 kDa.

### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# DATA

60 K – 50 K – 40 K – 30 K – 20 K –
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GIOT-2 (3421C3a): sc-81143. Western Blot analysis of human recombinant GIOT-2 fusion protein.

#### **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.