

# GIOT-2 (N-19): sc-247003

## 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<sub>2</sub>H<sub>2</sub>-type zinc fingers and one KRAB domain.

## REFERENCES

1. 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/>
3. 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 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GIoT-2 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-247003 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

GIOT-2 (N-19) is recommended for detection of GIoT-2 of 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); non cross-reactive with GIoT-1 or GIoT-3.

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.

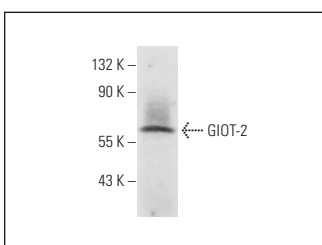
Molecular Weight of GIoT-2 isoforms 1/2/3: 77/68/73 kDa.

Positive Controls: human liver extract: sc-363766.

## 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.

## DATA



GIOT-2 (N-19): sc-247003. Western blot analysis of GIoT-2 expression in human liver tissue extract.

## RESEARCH USE

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