

GIOT-2 (D-18): sc-247004

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 C₂H₂-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 C₂H₂-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 (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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-247004 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 or our catalog for detailed protocols and support products.

APPLICATIONS

GIOT-2 (D-18) is recommended for detection of GIOT-2 of 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); 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.

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.