

ZNF12 (E-13): sc-104265

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. ZNF12 (zinc finger protein 12), also known as ZNF325 (zinc finger protein 325), GIOT-3 (gonadotropin-inducible ovary transcription repressor 3), KOX3 or HZF11, is a 501 amino acid nuclear protein belonging to the Krüppel C₂H₂-type zinc-finger protein family. ZNF12 is suggested to play a role in transcriptional regulation of MAPK signaling pathways, thereby mediating cellular functions. Containing eight C₂H₂-type zinc fingers and a KRAB domain, ZNF12 is encoded by a gene that maps to human chromosome 7p22.1.

REFERENCES

- Schuh, R., Aicher, W., Gaul, U., Côté, S., Preiss, A., Maier, D., Seifert, E., Nauber, U., Schröder, C. and Kemler, R. 1986. A conserved family of nuclear proteins containing structural elements of the finger protein encoded by Krüppel, a *Drosophila* segmentation gene. *Cell* 47: 1025-1032.
- Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. *New Biol.* 2: 363-374.
- Seite, P., Huebner, K., Rousseau-Merck, M.F., Berger, R. and Thiesen, H.J. 1991. Two human genes encoding zinc finger proteins, ZNF 12 (KOX 3) and ZNF 26 (KOX 20), map to chromosome 7p22-p21 and 12q24.33, respectively. *Hum. Genet.* 86: 585-590.
- Rousseau-Merck, M.F., Hillion, J., Jonveaux, P., Couillin, P., Seite, P., Thiesen, H.J. and Berger, R. 1993. Chromosomal localization of 9 KOX zinc finger genes: physical linkages suggest clustering of KOX genes on chromosomes 12, 16, and 19. *Hum. Genet.* 92: 583-587.
- Abrink, M., Aveskogh, M. and Hellman, L. 1995. Isolation of cDNA clones for 42 different Krüppel-related zinc finger proteins expressed in the human monoblast cell line U-937. *DNA Cell Biol.* 14: 125-136.
- Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 194536. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: ZNF12 (human) mapping to 7p22.1.

SOURCE

ZNF12 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF12 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-104265 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZNF12 (E-13) is recommended for detection of ZNF12 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 family members GIOT-1 or GIOT-2.

ZNF12 (E-13) is also recommended for detection of ZNF12 in additional species, including canine.

Suitable for use as control antibody for ZNF12 siRNA (h): sc-89639, ZNF12 shRNA Plasmid (h): sc-89639-SH and ZNF12 shRNA (h) Lentiviral Particles: sc-89639-V.

Molecular Weight of ZNF12: 58 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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.

STORAGE

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

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.