SANTA CRUZ BIOTECHNOLOGY, INC.

ZFP260 (E-19): sc-249424



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. ZFP260 (zinc finger protein 260), also known as OZRF1 or ZNF260, is a 412 amino acid nuclear protein belonging to the Krüppel C₂H₂-type zinc-finger protein family. Containing 13 C₂H₂-type zinc fingers, ZFP260 is a transcription factor that acts as a cardiac regulator and an effector of α 1-adrenergic signaling. ZFP260 binds to PE response elements (PERE) present in the promoter of genes and acts as a direct transcriptional activator of ANP. ZFP260 interacts with GATA-4 and is upregulated by activation of α 1-adrenergic receptors.

REFERENCES

- 1. Thiesen, H.J. 1990. Multiple genes encoding zinc finger domains are expressed in human T cells. New Biol. 2: 363-374.
- Blottière, L., et al. 1999. Cloning, characterization, and chromosome assignment of Zfp146 the mouse ortholog of human ZNF146, a gene amplified and overexpressed in pancreatic cancer, and Zfp260 a closely related gene. Cytogenet. Cell Genet. 85: 297-300.
- 3. Laity, J.H., et al. 2001. Zinc finger proteins: new insights into structural and functional diversity. Curr. Opin. Struct. Biol. 11: 39-46.
- Matthews, J.M. and Sunde, M. 2002. Zinc fingers—folds for many occasions. IUBMB Life 54: 351-355.
- 5. Huang, J., et al. 2004. ZNF216 Is an A20-like and I κ B kinase γ -interacting inhibitor of NF κ B activation. J. Biol. Chem. 279: 16847-16853.
- Brown, R.S. 2005. Zinc finger proteins: getting a grip on RNA. Curr. Opin. Struct. Biol. 15: 94-98.
- 7. Debrus, S., et al. 2005. The zinc finger-only protein ZFP260 is a novel cardiac regulator and a nuclear effector of α 1-adrenergic signaling. Mol. Cell. Biol. 25: 8669-8682.
- 8. Hall, T.M. 2005. Multiple modes of RNA recognition by zinc finger proteins. Curr. Opin. Struct. Biol. 15: 367-373.
- 9. Gamsjaeger, R., et al. 2007. Sticky fingers: zinc-fingers as proteinrecognition motifs. Trends Biochem. Sci. 32: 63-70.

CHROMOSOMAL LOCATION

Genetic locus: Zfp260 (mouse) mapping to 7 B1.

SOURCE

ZFP260 (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ZFP260 of mouse origin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-249424 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZFP260 (E-19) is recommended for detection of ZFP260 of mouse and rat 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 other ZFP family members.

Suitable for use as control antibody for ZFP260 siRNA (m): sc-155540, ZFP260 shRNA Plasmid (m): sc-155540-SH and ZFP260 shRNA (m) Lentiviral Particles: sc-155540-V.

Molecular Weight of ZFP260: 47 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) Immunofluo-rescence: use 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.