

ZFP161 (C-14): sc-85224



The Power to Question

BACKGROUND

ZFP161 (zinc finger protein 161), also known as ZF5, ZBTB14 or ZNF478, is a 449 amino acid member of the Krüppel C₂H₂-type zinc-finger protein family. Localized to distinct regions within the nucleus, ZFP161 functions both as a transcriptional repressor of Thymidine Kinase (TK) and c-Myc promoters and as a transcriptional activator of the dopamine transporter (DAT) promoter. ZFP161 contains one BTB (POZ) domain and five C₂H₂-type zinc fingers which direct its specific localization and nucleic acid binding, respectively. Defects in the gene encoding ZFP161 may be associated with holoprosencephaly type 4 (HPE4), a structural anomaly of the brain characterized by a flattened nasal tip with no visible septum, hypotelorism, lack of nasal bridge, ptosis of the left upper eyelid and, in some cases, infant death.

REFERENCES

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- Sobek-Klocke, I., et al. 1997. The human gene ZFP161 on 18p11.21-pter encodes a putative c-Myc repressor and is homologous to murine Zfp161 (Chr 17) and Zfp161-rs1 (X Chr). *Genomics* 43: 156-164.
- Sugiura, K., et al. 1997. Expression cloning and intracellular localization of a human ZF5 homologue. *Biochim. Biophys. Acta* 1352: 23-26.
- Obata, T., et al. 1999. Analysis of the consensus binding sequence and the DNA-binding domain of ZF5. *Biochem. Biophys. Res. Commun.* 255: 528-534.
- Numoto, M., et al. 1999. ZF5, which is a Krüppel-type transcriptional repressor, requires the zinc finger domain for self-association. *Biochem. Biophys. Res. Commun.* 256: 573-578.
- Lee, K.H., et al. 2004. Human zinc finger protein 161, a novel transcriptional activator of the dopamine transporter. *Biochem. Biophys. Res. Commun.* 313: 969-976.

CHROMOSOMAL LOCATION

Genetic locus: ZFP161 (human) mapping to 18p11.31; Zfp161 (mouse) mapping to 17 E1.3.

SOURCE

ZFP161 (C-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of ZFP161 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85224 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-85224 X, 100 µg/0.1 ml.

APPLICATIONS

ZFP161 (C-14) is recommended for detection of ZFP161 of mouse, rat and 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 ZFP64.

ZFP161 (C-14) is also recommended for detection of ZFP161 in additional species, including equine and canine.

Suitable for use as control antibody for ZFP161 siRNA (h): sc-76958, ZFP161 siRNA (m): sc-155533, ZFP161 shRNA Plasmid (h): sc-76958-SH, ZFP161 shRNA Plasmid (m): sc-155533-SH, ZFP161 shRNA (h) Lentiviral Particles: sc-76958-V and ZFP161 shRNA (m) Lentiviral Particles: sc-155533-V.

ZFP161 (C-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

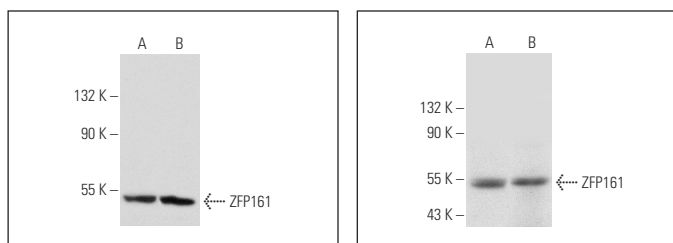
Molecular Weight of ZFP161: 51 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HeLa nuclear extract: sc-2120 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ZFP161 (C-14): sc-85224. Western blot analysis of ZFP161 expression in Jurkat (A) and K-562 (B) whole cell lysates.

ZFP161 (C-14): sc-85224. Western blot analysis of ZFP161 expression in HeLa nuclear extract (A) and human liver tissue extract (B).

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.