

ZNF746 (S-20): sc-249756

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. ZNF746 (zinc finger protein 746), also known as PARIS (parkin-interacting substrate) is a 644 amino acid cytoplasmic and nuclear protein that belongs to the Krüppel C₂H₂-type zinc-finger protein family. Existing as three alternatively spliced isoforms, ZNF746 functions as a transcription repressor and interacts with Parkin. The gene encoding ZNF746 maps to human chromosome 7q36.1 and mouse chromosome 6 B2.3.

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. Aubry, M., et al. 1992. Cloning of six new genes with zinc finger motifs mapping to short and long arms of human acrocentric chromosome 22 (p and q11.2). *Genomics* 13: 641-648.
3. Lichter, P., et al. 1992. Clustering of C2-H2 zinc finger motif sequences within telomeric and fragile site regions of human chromosomes. *Genomics* 13: 999-1007.
4. Urrutia, R. 2003. KRAB-containing zinc-finger repressor proteins. *Genome Biol.* 4: 231.
5. Huntley, S., et al. 2006. A comprehensive catalog of human KRAB-associated zinc finger genes: insights into the evolutionary history of a large family of transcriptional repressors. *Genome Res.* 16: 669-677.
6. Tian, C.Y., et al. 2006. Progress in the study of KRAB zinc finger protein. *Yi Chuan.* 28: 1451-1456.
7. Shin, J.H., et al. 2011. PARIS (ZNF746) repression of PGC-1 α contributes to neurodegeneration in Parkinson's disease. *Cell* 144: 689-702.

CHROMOSOMAL LOCATION

Genetic locus: ZNF746 (human) mapping to 7q36.1; Zfp746 (mouse) mapping to 6 B2.3.

SOURCE

ZNF746 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF746 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-249756 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ZNF746 (S-20) is recommended for detection of ZNF746 of mouse, rat and 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).

ZNF746 (S-20) is also recommended for detection of ZNF746 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for ZNF746 siRNA (h): sc-89806, ZNF746 siRNA (m): sc-155788, ZNF746 shRNA Plasmid (h): sc-89806-SH, ZNF746 shRNA Plasmid (m): sc-155788-SH, ZNF746 shRNA (h) Lentiviral Particles: sc-89806-V and ZNF746 shRNA (m) Lentiviral Particles: sc-155788-V.

Molecular Weight of ZNF746 isoforms: 69/48 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.

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.