

ZNF804A (S-16): sc-241169

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. ZNF804A (zinc-finger protein 804A) is a 1,209 amino acid protein that contains one C₂H₂-type zinc finger. ZNF804A interacts with Ataxin-1, a protein that is involved in RNA metabolism. The gene encoding ZNF804A maps to human chromosome 2, which consists of 237 million bases and encodes over 1,400 genes, making up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2.

REFERENCES

1. Yue, S., et al. 2001. The spinocerebellar ataxia type 1 protein, ataxin-1, has RNA-binding activity that is inversely affected by the length of its polyglutamine tract. *Hum. Mol. Genet.* 10: 25-30.
2. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.
3. Lim, J., et al. 2006. A protein-protein interaction network for human inherited ataxias and disorders of Purkinje cell degeneration. *Cell* 125: 801-814.
4. Sjöblom, T., et al. 2006. The consensus coding sequences of human breast and colorectal cancers. *Science* 314: 268-274.
5. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 612282. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Dwyer, S., et al. 2010. No evidence that rare coding variants in ZNF804A confer risk of schizophrenia. *Am. J. Med. Genet. B Neuropsychiatr. Genet.* 153B: 1411-1416.
7. Balog, Z., et al. 2011. ZNF804A may be associated with executive control of attention. *Genes Brain Behav.* 10: 223-227.

CHROMOSOMAL LOCATION

Genetic locus: Zfp804a (mouse) mapping to 2 D.

SOURCE

ZNF804A (S-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZNF804A of mouse 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-241169 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.

APPLICATIONS

ZNF804A (S-16) is recommended for detection of ZNF804A of mouse and rat 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 ZNF804B.

Suitable for use as control antibody for ZNF804A siRNA (m): sc-155803, ZNF804A shRNA Plasmid (m): sc-155803-SH and ZNF804A shRNA (m) Lentiviral Particles: sc-155803-V.

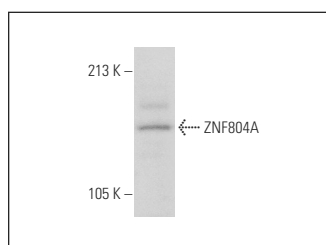
Molecular Weight of ZNF804A: 137 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ZNF804A (S-16): sc-241169. Western blot analysis of ZNF804A expression in NIH/3T3 whole cell lysate.

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.