

ZNF804A (P-13): sc-241173

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., Hao, 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.* 153: 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 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus 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-241173 P, (100 µg 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

ZNF804A (P-13) 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), immunohistochemistry (including paraffin-embedded sections) (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.

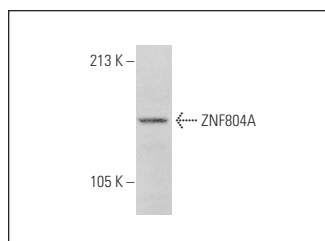
Molecular Weight of ZNF804A: 137 kDa.

Positive Controls: PC-12 cell lysate: sc-2250.

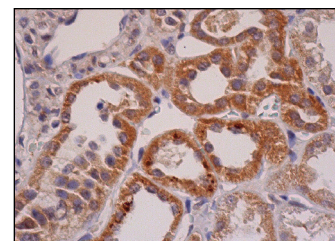
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



ZNF804A (P-13): sc-241173. Western blot analysis of ZNF804A expression in PC-12 whole cell lysate.



ZNF804A (P-13): sc-241173. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules.

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.