ZNF774 (E-2): sc-515778



The Power to Questio

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. ZNF774 (zinc finger protein 774) is a 483 amino acid protein that localizes to the nucleus and contains 12 $\rm C_2H_2$ -type zinc fingers and a KRAB domain. One of several members of the Krüppel $\rm C_2H_2$ -type zinc-finger protein family, ZNF774 is thought to be involved in transcriptional regulation events. The gene encoding ZNF774 maps to human chromosome 15q26.1, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

REFERENCES

- 1. Lichter, P., et al. 1992. Clustering of C_2H_2 zinc finger motif sequences within telomeric and fragile site regions of human chromosomes. Genomics 13: 999-1007.
- Hurowitz, G.I., et al. 1993. Neuropsychiatric aspects of adult-onset Tay-Sachs disease: two case reports with several new findings. J. Neuropsychiatry Clin. Neurosci. 5: 30-36.
- 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.
- 4. Filion, G.J., et al. 2006. A family of human zinc finger proteins that bind methylated DNA and repress transcription. Mol. Cell. Biol. 26: 169-181.
- 5. Tian, C.Y., et al. 2006. Progress in the study of KRAB zinc finger protein. Yi Chuan 28: 1451-1456.

CHROMOSOMAL LOCATION

Genetic locus: ZNF774 (human) mapping to 15q26.1.

SOURCE

ZNF774 (E-2) is a mouse monoclonal antibody raised against amino acids 1-150 mapping at the N-terminus of ZNF774 of human origin.

PRODUCT

Each vial contains 200 $\mu g \, lg G_{2a}$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ZNF774 (E-2) is available conjugated to agarose (sc-515778 AC), 500 μ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515778 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515778 PE), fluorescein (sc-515778 FITC), Alexa Fluor® 488 (sc-515778 AF488), Alexa Fluor® 546 (sc-515778 AF546), Alexa Fluor® 594 (sc-515778 AF594) or Alexa Fluor® 647 (sc-515778 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515778 AF680) or Alexa Fluor® 790 (sc-515778 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ZNF774 (E-2) is recommended for detection of ZNF774 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for ZNF774 siRNA (h): sc-90307, ZNF774 shRNA Plasmid (h): sc-90307-SH and ZNF774 shRNA (h) Lentiviral Particles: sc-90307-V.

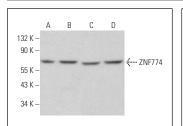
Molecular Weight of ZNF774: 55 kDa.

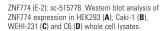
Positive Controls: HEK293 whole cell lysate: sc-45136, human kidney extract: sc-363764 or C6 whole cell lysate: sc-364373.

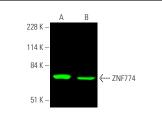
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-lgG κ BP-FITC: sc-516140 or m-lgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA







ZNF774 (E-2): sc-515778. Near-infrared western blot analysis of ZNF774 expression in C6 whole cell lysate (A) and human kidney tissue extract (B). Blocked with UltraCruz* Blocking Reagent: sc-516214. Detection reagent used: m-lgG κ BP-CFL 680: sc-516180.

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.

PROTOCOLS

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