

OTK18 (211-3.1-1): sc-135814

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. Zinc finger protein 175 (ZNF175), also known as OTK18, is a 711 amino acid member of the Krüppel C₂H₂-type zinc-finger protein family. Localized both to the nucleus and cytosol, ZNF175 contains 15 C₂H₂-type zinc fingers and one KRAB domain. Induced by HIV-1 infection, ZNF175 is thought to be an HIV-1-inducible transcriptional suppressor.

REFERENCES

1. Payre, F. and Vincent, A. 1988. Finger proteins and DNA-specific recognition: distinct patterns of conserved amino acids suggest different evolutionary modes. *FEBS Lett.* 234: 245-250.
2. Berg, J.M. 1988. Proposed structure for the zinc-binding domains from transcription factor IIIA and related proteins. *Proc. Natl. Acad. Sci. USA* 85: 99-102.
3. Rosenfeld, R. and Margalit, H. 1993. Zinc fingers: conserved properties that can distinguish between spurious and actual DNA-binding motifs. *J. Biomol. Struct. Dyn.* 11: 557-570.
4. Abrink, M., et al. 1995. Isolation of cDNA clones for 42 different Krüppel-related zinc finger proteins expressed in the human monoblast cell line U-937. *DNA Cell Biol.* 14: 125-136.
5. Walter, L. and Günther, E. 2000. Physical mapping and evolution of the centromeric class I gene-containing region of the rat MHC. *Immunogenetics* 51: 829-837.

CHROMOSOMAL LOCATION

Genetic locus: ZNF175 (human) mapping to 19q13.41.

SOURCE

OTK18 (211-3.1-1) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 1-178 of OTK18 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

OTK18 (211-3.1-1) is available conjugated to agarose (sc-135814 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-135814 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-135814 PE), fluorescein (sc-135814 FITC), Alexa Fluor® 488 (sc-135814 AF488), Alexa Fluor® 546 (sc-135814 AF546), Alexa Fluor® 594 (sc-135814 AF594) or Alexa Fluor® 647 (sc-135814 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-135814 AF680) or Alexa Fluor® 790 (sc-135814 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

OTK18 (211-3.1-1) is recommended for detection of amino acids 1-178 of OTK18 of 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).

Suitable for use as control antibody for OTK18 siRNA (h): sc-97677, OTK18 shRNA Plasmid (h): sc-97677-SH and OTK18 shRNA (h) Lentiviral Particles: sc-97677-V.

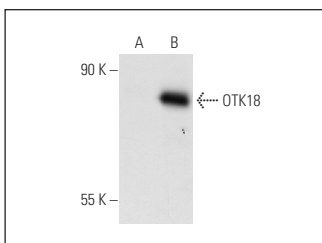
Molecular Weight of OTK18: 82 kDa.

Positive Controls: OTK18 (h): 293T Lysate: sc-116354 or Jurkat whole cell lysate: sc-2204.

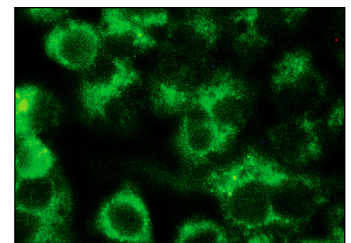
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



OTK18 (211-3.1-1): sc-135814. Western blot analysis of OTK18 expression in non-transfected: sc-117752 (A) and human OTK18 transfected: sc-116354 (B) 293T whole cell lysates.



ZNF175 (211-3.1-1): sc-135814. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

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.