

# ZNF654 (D-21): sc-134206

## 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. As a member of the krueppel C<sub>2</sub>H<sub>2</sub>-type zinc-finger protein family, ZNF654 (Zinc finger protein 654), also known as Melanoma-associated antigen, is a 581 amino acid nuclear protein that contains five C<sub>2</sub>H<sub>2</sub>-type zinc fingers. The gene encoding ZNF654 maps to human chromosome 3, which is made up of about 214 million bases encoding over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Both ZNF654 and Vgl-3 are underexpressed in malignant ovarian tumor samples, suggesting that these proteins may play a role in ovarian tumorigenesis.

## REFERENCES

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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.
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5. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol. (Mosk.)* 37: 194-211.
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8. Ruiz-Herrera, A. and Robinson, T.J. 2008. Evolutionary plasticity and cancer breakpoints in human chromosome 3. *Bioessays* 30: 1126-1137.
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## CHROMOSOMAL LOCATION

Genetic locus: ZNF654 (human) mapping to 3p11.2; Zfp654 (mouse) mapping to 16 C1.3.

## SOURCE

ZNF654 (D-21) is an affinity purified rabbit polyclonal antibody raised against synthetic ZNF654 peptide of human origin.

## PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

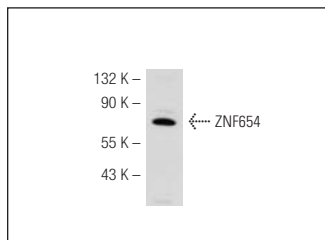
ZNF654 (D-21) is recommended for detection of ZNF654 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), 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).

Suitable for use as control antibody for ZNF654 siRNA (h): sc-78074, ZNF654 siRNA (m): sc-155774, ZNF654 shRNA Plasmid (h): sc-78074-SH, ZNF654 shRNA Plasmid (m): sc-155774-SH, ZNF654 shRNA (h) Lentiviral Particles: sc-78074-V and ZNF654 shRNA (m) Lentiviral Particles: sc-155774-V.

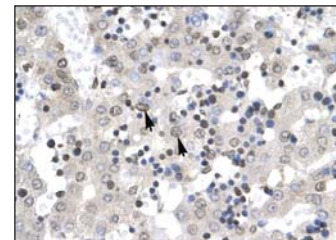
Molecular Weight of ZNF654: 66 kDa.

Positive Controls: 293T whole cell lysate or human liver tissue.

## DATA



ZNF654 (D-21): sc-134206. Western blot analysis of ZNF654 expression in 293T whole cell lysate.



ZNF654 (D-21): sc-134206. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human liver tissue showing nuclear and 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](http://www.scbt.com) or our catalog for detailed protocols and support products.