

# HSPC038 (D-21): sc-133681

## 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. HSPC038, also known as ZNF706 (zinc finger protein 706), PNAS-106 or PNAS-113, is a 76 amino acid protein that contains one C<sub>2</sub>H<sub>2</sub>-type zinc finger and is encoded by a gene which maps to chromosome 8. Consisting of nearly 146 million base pairs, chromosome 8 encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that maps to chromosome 8.

## REFERENCES

1. Becker, K.G., et al. 1995. Rapid isolation and characterization of 118 novel C<sub>2</sub>H<sub>2</sub>-type zinc finger cDNAs expressed in human brain. *Hum. Mol. Genet.* 4: 685-691.
2. Wildenauer, D.B., et al. 1999. Chromosomes 8 and 10 workshop. *Am. J. Med. Genet.* 88: 239-243.
3. Zhang, Q.H., et al. 2000. Cloning and functional analysis of cDNAs with open reading frames for 300 previously undefined genes expressed in CD34<sup>+</sup> hematopoietic stem/progenitor cells. *Genome Res.* 10: 1546-1560.
4. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. *Biochem. Biophys. Res. Commun.* 289: 111-115.
5. Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. *Hum. Genet.* 110: 64-67.
6. McQueen, M.B., et al. 2005. Combined analysis from eleven linkage studies of bipolar disorder provides strong evidence of susceptibility loci on chromosomes 6q and 8q. *Am. J. Hum. Genet.* 77: 582-595.
7. Agrelo, R., et al. 2006. Epigenetic inactivation of the premature aging Werner syndrome gene in human cancer. *Proc. Natl. Acad. Sci. USA* 103: 8822-8827.

## CHROMOSOMAL LOCATION

Genetic locus: ZNF706 (human) mapping to 8q22.3; Zfp706 (mouse) mapping to 15 B3.1.

## SOURCE

HSPC038 (D-21) is an affinity purified rabbit polyclonal antibody raised against synthetic HSPC038 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.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

HSPC038 (D-21) is recommended for detection of HSPC038 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 HSPC038 siRNA (h): sc-77626, HSPC038 siRNA (m): sc-146105, HSPC038 shRNA Plasmid (h): sc-77626-SH, HSPC038 shRNA Plasmid (m): sc-146105-SH, HSPC038 shRNA (h) Lentiviral Particles: sc-77626-V and HSPC038 shRNA (m) Lentiviral Particles: sc-146105-V.

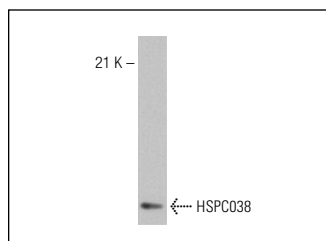
Molecular Weight of HSPC038: 8 kDa.

Positive Controls: human lung tissue.

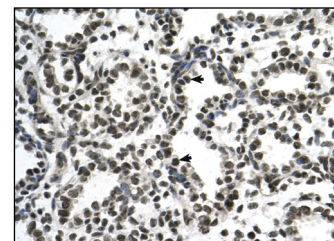
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



HSPC038 (D-21): sc-133681. Western blot analysis of human HSPC038 transfected 293T whole cell lysate.



HSPC038 (D-21): sc-133681. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human lung tissue showing nuclear localization.

## 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.