

Headpin (31): sc-136384

BACKGROUND

Headpin (hurpin, SerpinB13) is a skin-specific, UV-repressible serine proteinase inhibitor (Serp) belonging to the ovalbumin serpin family. Headpin is abundant in the human keratinocyte cell line HaCaT, and in lesional keratinocytes from psoriatic skin. Headpin downregulation occurs in squamous cell carcinoma of the oral cavity and in squamous cell carcinoma cell lines of the head and neck.

REFERENCES

- Spring, P., Nakashima, T., Frederick, M., Henderson, Y. and Clayman, G. 1999. Identification and cDNA cloning of headpin, a novel differentially expressed Serpin that maps to chromosome 18q. *Biochem. Biophys. Res. Commun.* 264: 299-304.
- Abts, H.F., Welss, T., Mirmohammadsadegh, A., Kohrer, K., Michel, G. and Ruzicka, T. 1999. Cloning and characterization of hurpin (protease inhibitor 13): A new skin-specific, UV-repressible serine proteinase inhibitor of the Ovalbumin Serpin family. *J. Mol. Biol.* 293: 29-39.
- Nakashima, T., Pak, S.C., Silverman, G.A., Spring, P.M., Frederick, M.J. and Clayman, G.L. 2000. Genomic cloning, mapping, structure and promoter analysis of Headpin, a Serpin which is downregulated in head and neck cancer cells. *Biochim. Biophys. Acta* 1492: 441-446.
- Jayakumar, A., Kang, Y., Frederick, M.J., Pak, S.C., Henderson, Y., Holton, P.R., Mitsudo, K., Silverman, G.A., AK, E.L.-N., Bromme, D. and Clayman, G.L. 2003. Inhibition of the cysteine proteinases cathepsins K and L by the Serpin Headpin (Serpin B13): a kinetic analysis. *Arch. Biochem. Biophys.* 409: 367-374.
- LocusLink Report (LocusID: 5275). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: SERPINB13 (human) mapping to 18q21.33; Serpinb13 (mouse) mapping to 1 E2.1.

SOURCE

Headpin (31) is a mouse monoclonal antibody raised against amino acids 1-391 representing full length Headpin 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-136384 X, 200 µg/0.1 ml.

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 for detailed protocols and support products.

APPLICATIONS

Headpin (31) is recommended for detection of Headpin 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Headpin siRNA (h): sc-106889, Headpin siRNA (m): sc-145919, Headpin shRNA Plasmid (h): sc-106889-SH, Headpin shRNA Plasmid (m): sc-145919-SH, Headpin shRNA (h) Lentiviral Particles: sc-106889-V and Headpin shRNA (m) Lentiviral Particles: sc-145919-V.

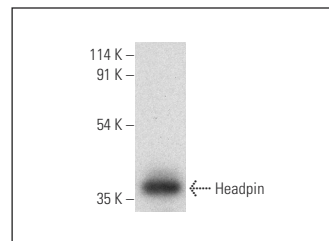
Molecular Weight of Headpin: 44 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or Ha-Cat whole cell lysate.

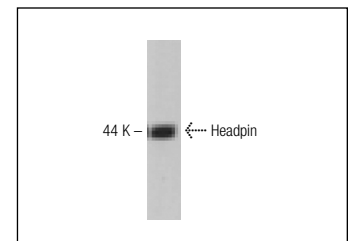
RECOMMENDED SUPPORT REAGENTS

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, 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 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



Headpin (31): sc-136384. Western blot analysis of Headpin expression in A-431 whole cell lysate.



Headpin (31): sc-136384. Western blot analysis of Headpin expression in Ha-Cat whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures. Not for resale.