

# Headpin (H-7): sc-393306

## BACKGROUND

Headpin (hurpin, serpinB13) is a skin-specific, UV-repressible serine proteinase inhibitor (serpin) 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

1. Abts, H.F., et al. 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.
2. Spring, P., et al. 1999. Identification and cDNA cloning of Headpin, a novel differentially expressed serpin that maps to chromosome 18q. *Biochem. Biophys. Res. Commun.* 264: 299-304.
3. Nakashima, T., et al. 2000. Genomic cloning, mapping, structure and promoter analysis of Headpin, a serpin which is down-regulated in head and neck cancer cells. *Biochim. Biophys. Acta* 1492: 441-446.
4. Jayakumar, A., et al. 2003. Inhibition of the cysteine proteinases cathepsins K and L by the serpin Headpin (SERPINB13): a kinetic analysis. *Arch. Biochem. Biophys.* 409: 367-374.
5. LocusLink Report (LocusID: 5275). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: Serpinb13 (mouse) mapping to 1 E2.1.

## SOURCE

Headpin (H-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 255-282 within an internal region of Headpin of rat origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Headpin (H-7) is available conjugated to agarose (sc-393306 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393306 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393306 PE), fluorescein (sc-393306 FITC), Alexa Fluor® 488 (sc-393306 AF488), Alexa Fluor® 546 (sc-393306 AF546), Alexa Fluor® 594 (sc-393306 AF594) or Alexa Fluor® 647 (sc-393306 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393306 AF680) or Alexa Fluor® 790 (sc-393306 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393306 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## STORAGE

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

## APPLICATIONS

Headpin (H-7) is recommended for detection of Headpin of mouse and rat 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 Headpin siRNA (m): sc-145919, Headpin shRNA Plasmid (m): sc-145919-SH and Headpin shRNA (m) Lentiviral Particles: sc-145919-V.

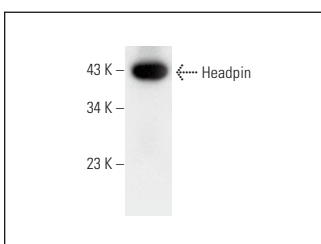
Molecular Weight of Headpin: 44 kDa.

Positive Controls: mouse skin extract: sc-364251.

## 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



Headpin (H-7): sc-393306. Western blot analysis of Headpin expression in mouse skin tissue extract.

## 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) for detailed protocols and support products.

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