

Headpin (D-14): sc-27454

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. PMID: 10512713
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. Comm.* 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.

CHROMOSOMAL LOCATION

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

SOURCE

Headpin (D-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Headpin of rat origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-27454 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Headpin (D-14) is recommended for detection of Headpin of mouse and rat 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 Headpin siRNA (m): sc-145919, Headpin shRNA Plasmid (m): sc-145919-SH and Headpin shRNA (m) Lentiviral Particles: sc-145919-V.

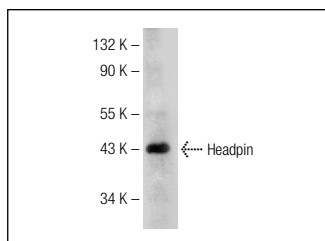
Molecular Weight of Headpin: 44 kDa.

Positive Controls: mouse skin tissue extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Headpin (D-14): sc-27454. Western blot analysis of Headpin expression in mouse skin tissue extract.

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 or our catalog for detailed protocols and support products.