# Headpin (E-1): sc-398857



The Power to Question

## **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**

- 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.
- 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 (human) mapping to 18q21.33.

## **SOURCE**

Headpin (E-1) is a mouse monoclonal antibody raised against amino acids 285-340 mapping near the C-terminus of Headpin of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g \ lgG_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Headpin (E-1) is available conjugated to agarose (sc-398857 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398857 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398857 PE), fluorescein (sc-398857 FITC), Alexa Fluor $^{\circ}$  488 (sc-398857 AF488), Alexa Fluor $^{\circ}$  546 (sc-398857 AF546), Alexa Fluor $^{\circ}$  594 (sc-398857 AF594) or Alexa Fluor $^{\circ}$  647 (sc-398857 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor $^{\circ}$  680 (sc-398857 AF680) or Alexa Fluor $^{\circ}$  790 (sc-398857 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

#### **STORAGE**

Store at 4° C, \*\*D0 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 (E-1) is recommended for detection of Headpin of human 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 (h): sc-106889, Headpin shRNA Plasmid (h): sc-106889-SH and Headpin shRNA (h) Lentiviral Particles: sc-106889-V.

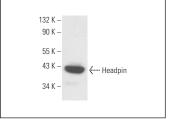
Molecular Weight of Headpin: 44 kDa kDa.

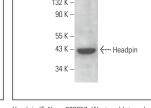
Positive Controls: A-431 whole cell lysate: sc-2201 or Jurkat whole cell lysate: sc-2204.

## **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> 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-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  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 (E-1): sc-398857. Western blot analysis of

Headpin (E-1): sc-398857. Western blot analysis of Headpin expression in Jurkat whole cell lysate.

# **RESEARCH USE**

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