

elafin (H-2): sc-398075

BACKGROUND

Elafin, also known as elastase-specific inhibitor (ESI) or skin-derived antileukoproteinase (SKALP), is a low molecular weight elastase inhibitor derived from psoriatic skin. Elafin is found in the epidermis of several inflammatory skin diseases, but not in normal human epidermis. It is found in the urine of psoriatic patients, and immunohistochemical studies show that elafin is found in the suprabasal differentiated keratinocytes of psoriatic epidermis. In inflamed skin, elafin exists both as a free form and as an immobilized form covalently attached to the cornified envelopes by transglutaminase cross-linking. Although there is no allelic association between pustular psoriasis (or psoriasis in general) and polymorphism of the PI 3 gene, a decrease of elafin is found in lesional skin of patients with pustular psoriasis compared with plaque-type psoriasis. The gene which encodes elafin maps to human chromosome 20q13.12.

REFERENCES

- Chang, A., et al. 1990. Elastase-inhibiting activity in scaling skin disorders. *Acta Derm. Venereol.* 70: 147-151.
- Schalkwijk, J., et al. 1990. Skin-derived antileucoproteases (SKALPs): characterization of two new elastase inhibitors from psoriatic epidermis. *Br. J. Dermatol.* 122: 631-641.
- Molhuizen, H.O., et al. 1993. SKALP/elafin: an elastase inhibitor from cultured human keratinocytes. Purification, cDNA sequence, and evidence for transglutaminase cross-linking. *J. Biol. Chem.* 268: 12028-12032.
- Molhuizen, H.O., et al. 1994. Assignment of the human gene encoding the epidermal serine proteinase inhibitor SKALP (PI3) to chromosome region 20q12→q13. *Cytogenet. Cell Genet.* 66: 129-131.
- Kuijpers, A.L., et al. 1998. SKALP/elafin gene polymorphisms are not associated with pustular forms of psoriasis. *Clin. Genet.* 54: 96-101.

CHROMOSOMAL LOCATION

Genetic locus: PI3 (human) mapping to 20q13.12.

SOURCE

elafin (H-2) is a mouse monoclonal antibody raised against amino acids 1-117 representing full length elafin of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

elafin (H-2) is available conjugated to agarose (sc-398075 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398075 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398075 PE), fluorescein (sc-398075 FITC), Alexa Fluor® 488 (sc-398075 AF488), Alexa Fluor® 546 (sc-398075 AF546), Alexa Fluor® 594 (sc-398075 AF594) or Alexa Fluor® 647 (sc-398075 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398075 AF680) or Alexa Fluor® 790 (sc-398075 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

elafin (H-2) is recommended for detection of elafin 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 elafin siRNA (h): sc-42866, elafin shRNA Plasmid (h): sc-42866-SH and elafin shRNA (h) Lentiviral Particles: sc-42866-V.

Molecular Weight of mature elafin: 6 kDa.

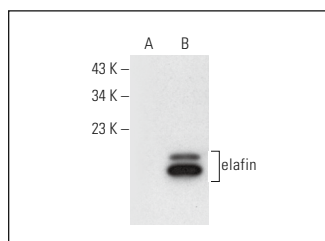
Molecular Weight of elafin precursor/preproelafin: 11 kDa.

Positive Controls: human LECT2 transfected HEK293T 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, 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



elafin (H-2): sc-398075. Western blot analysis of elafin expression in non-transfected (A) and human elafin transfected (B) HEK293T whole cell lysates.

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 for detailed protocols and support products.