Epilysin (h3): 293T Lysate: sc-374950



The Power to Question

BACKGROUND

Epilysin, also known as matrix metalloproteinase-28 (MMP-28), is a secreted protein that belongs to the peptidase M10A family. Matrix metalloproteinase proteins are responsible for the breakdown of the extracellular matrix which is important for normal physiological processes such as tissue remodeling, reproduction and embryonic development. Epilysin is produced by proliferating keratinocytes and is responsible for mediating the degradation of casein. Its expression is upregulated in response to injury of the skin suggesting that Epilysin may be involved in tissue repair and homeostasis. In addition, Epilysin may function predominantly in the nervous system. Incubation of Epilysin with rat embryonic brain tissue results in the degradation of myelin proteins. In *Xenopus*, Epilysin localizes to nerves and is upregulated during neurulation. This suggests that Epilysin plays an evolutionarily conserved role in neural development and may be involved in modulating the axonal-glial extracellular environment.

REFERENCES

- 1. Illman, S.A., et al. 2001. Promoter characterization of the human and mouse epilysin (MMP-28) genes. Gene 275: 185-194.
- Lohi, J., et al. 2001. Epilysin, a novel human matrix metalloproteinase (MMP-28) expressed in testis and keratinocytes and in response to injury.
 J. Biol. Chem. 276: 10134-10144.
- Saarialho-Kere, U., et al. 2002. Epilysin (MMP-28) expression is associated with cell proliferation during epithelial repair. J. Invest. Dermatol. 119: 14-21.
- Momohara, S., et al. 2004. Matrix metalloproteinase 28/epilysin expression in cartilage from patients with rheumatoid arthritis and osteoarthritis: comment on the article by Kevorkian et al. Arthritis Rheum. 50: 4074-4075.
- 5. Bister, V.O., et al. 2004. Differential expression of three matrix metalloproteinases, MMP-19, MMP-26, and MMP-28, in normal and inflamed intestine and colon cancer. Dig. Dis. Sci. 49: 653-661.
- Renò, F., et al. 2005. Effect of *in vitro* mechanical compression on Epilysin (matrix metalloproteinase-28) expression in hypertrophic scars. Wound Repair Regen. 13: 255-261.
- 7. Lin, M.H., et al. 2006. Functional role of matrix metalloproteinase-28 in the oral squamous cell carcinoma. Oral Oncol. 42: 907-913.
- 8. Werner, S.R., et al. 2007. Neural MMP-28 expression precedes myelination during development and peripheral nerve repair. Dev. Dyn. 236: 2852-2864.
- Altincicek, B. and Vilcinskas, A. 2008. Identification of a lepidopteran matrix metalloproteinase with dual roles in metamorphosis and innate immunity. Dev. Comp. Immunol. 32: 400-409.

CHROMOSOMAL LOCATION

Genetic locus: MMP28 (human) mapping to 17q12.

PRODUCT

Epilysin (h3): 293T Lysate represents a lysate of human Epilysin transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Epilysin (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive Epilysin antibodies. Recommended use: 10-20 µl per lane.

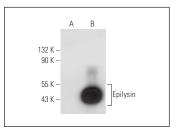
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Epilysin (F-10): sc-515010 is recommended as a positive control antibody for Western Blot analysis of enhanced human Epilysin expression in Epilysin transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Epilysin (F-10): sc-515010. Western blot analysis of Epilysin expression in non-transfected: sc-117752 (**A**) and human Epilysin transfected: sc-374950 (**B**) 293T whole cell bester.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.

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