

Epilysin (F-10): sc-515010

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.
2. 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.
3. Saarialho-Kere, U., et al. 2002. Epilysin (MMP-28) expression is associated with cell proliferation during epithelial repair. *J. Invest. Dermatol.* 119: 14-21.
4. 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.

CHROMOSOMAL LOCATION

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

SOURCE

Epilysin (F-10) is a mouse monoclonal antibody raised against amino acids 1-66 mapping at the N-terminus of Epilysin of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Epilysin (F-10) is available conjugated to agarose (sc-515010 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515010 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515010 PE), fluorescein (sc-515010 FITC), Alexa Fluor® 488 (sc-515010 AF488), Alexa Fluor® 546 (sc-515010 AF546), Alexa Fluor® 594 (sc-515010 AF594) or Alexa Fluor® 647 (sc-515010 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515010 AF680) or Alexa Fluor® 790 (sc-515010 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Epilysin (F-10) is recommended for detection of Epilysin 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 Epilysin siRNA (h): sc-62278, Epilysin shRNA Plasmid (h): sc-62278-SH and Epilysin shRNA (h) Lentiviral Particles: sc-62278-V.

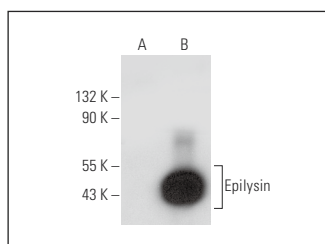
Molecular Weight of Epilysin: 59 kDa.

Positive Controls: Epilysin (h3): 293T Lysate: sc-374950.

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



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 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.

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