

# Epilysin (K-19): sc-55644

## 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-glia extracellular environment.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: MMP28 (human) mapping to 17q12; Mmp28 (mouse) mapping to 11 C.

## SOURCE

Epilysin (K-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of epilysin of human 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-55644 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Epilysin (K-19) is recommended for detection of Epilysin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Epilysin (K-19) is also recommended for detection of Epilysin in additional species, including equine.

Suitable for use as control antibody for Epilysin siRNA (h): sc-62278, Epilysin siRNA (m): sc-62279, Epilysin shRNA Plasmid (h): sc-62278-SH, Epilysin shRNA Plasmid (m): sc-62279-SH, Epilysin shRNA (h) Lentiviral Particles: sc-62278-V and Epilysin shRNA (m) Lentiviral Particles: sc-62279-V.

Molecular Weight of Epilysin: 59 kDa.

## 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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Epilysin (F-10): sc-515010**, our highly recommended monoclonal alternative to Epilysin (K-19).