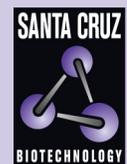


emerin (M-20): sc-8086



The Power to Question

BACKGROUND

Emerin is believed to be a member of the nuclear lamina associated protein family. It is ubiquitously expressed and localized to the nuclear membrane in normal cells. Mutations of the gene that encodes emerin result in the X-linked recessive disease Emery-Dreifuss muscular dystrophy (EDMD), which is characterized by slowly progressing contractures, skeletal muscle wasting and cardiomyopathy. Research has demonstrated that the lack of emerin expression is one cause of EDMD. Emerin is involved in the association of the nuclear membrane with the lamina, and is localized specifically to desmosomes and fasciae adherentes in the heart. This may account for conduction defects in patients with EDMD.

REFERENCES

1. Bione, S., et al. 1994. Identification of a novel X-linked gene responsible for Emery-Dreifuss muscular dystrophy. *Nat. Genet.* 8: 323-327.
2. Bione, S., et al. 1995. Identification of new mutations in the Emery-Dreifuss muscular dystrophy gene and evidence for genetic heterogeneity of the disease. *Hum. Mol. Genet.* 4: 1859-1863.
3. Cartegni, L., et al. 1997. Heart-specific localization of emerin: new insights into Emery-Dreifuss muscular dystrophy. *Hum. Mol. Genet.* 6: 2257-2264.
4. Kubo, S., et al. 1997. Emery-Dreifuss muscular dystrophy. *Nippon Rinsho* 55: 3186-3189.
5. Small, K. and Warren, S.T. 1998. Emerin deletions occurring on both Xq28 inversion backgrounds. *Hum. Mol. Genet.* 7: 135-139.

CHROMOSOMAL LOCATION

Genetic locus: EMD (human) mapping to Xq28; Emd (mouse) mapping to X A7.3.

SOURCE

emerin (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of emerin of mouse 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-8086 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO 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 or our catalog for detailed protocols and support products.

APPLICATIONS

emerin (M-20) is recommended for detection of emerin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

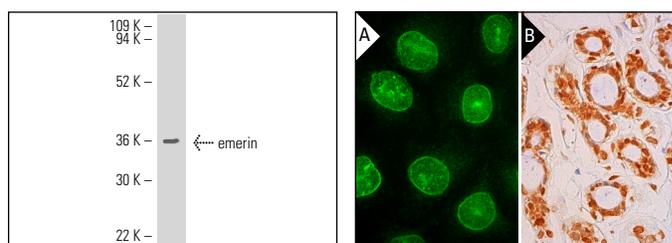
emerin (M-20) is also recommended for detection of emerin in additional species, including canine and bovine.

Suitable for use as control antibody for emerin siRNA (h): sc-35296, emerin siRNA (m): sc-35297, emerin shRNA Plasmid (h): sc-35296-SH, emerin shRNA Plasmid (m): sc-35297-SH, emerin shRNA (h) Lentiviral Particles: sc-35296-V and emerin shRNA (m) Lentiviral Particles: sc-35297-V.

Molecular Weight of emerin: 37 kDa.

Positive Controls: A549 cell lysate: sc-2413, HeLa whole cell lysate: sc-2200 or Saos-2 cell lysate: sc-2235.

DATA



emerin (M-20): sc-8086. Western blot analysis of emerin expression in A549 whole cell lysate

emerin (M-20): sc-8086. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear envelope localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human breast tissue showing nuclear staining of glandular cells and myoepithelial cells (B).

SELECT PRODUCT CITATIONS

1. Yadav, N., et al. 2009. The therapeutic effect of bone marrow-derived liver cells in the phenotypic correction of murine hemophilia A. *Blood* 114: 4552-4561.

RESEARCH USE

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



Try **emerin (H-12): sc-25284** or **emerin (G-10): sc-398067**, our highly recommended monoclonal alternatives to emerin (M-20).