

# emerin (C-20): sc-8084

## 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 fascia 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.

## CHROMOSOMAL LOCATION

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

## SOURCE

emerin (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of emerin 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-8084 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

emerin (C-20) is recommended for detection of emerin of human and, to a lesser extent, mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

emerin (C-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 shRNA Plasmid (h): sc-35296-SH and emerin shRNA (h) Lentiviral Particles: sc-35296-V.

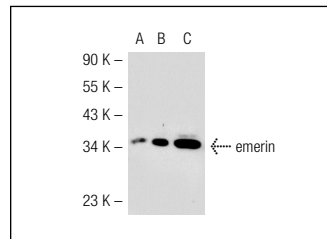
Molecular Weight of emerin: 37 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Saos-2 cell lysate: sc-2235 or emerin (h): 293T Lysate: sc-128526 .

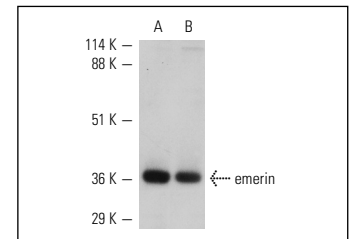
## RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



emerin (C-20): sc-8084. Western blot analysis of emerin expression in non-transfected 293T: sc-117752 (A), human emerin transfected 293T: sc-128526 (B) and K-562 (C) whole cell lysates.



emerin (C-20): sc-8084. Western blot analysis of emerin expression in HeLa (A) and Saos-2 (B) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Leach, N., et al. 2007. Emerin is hyperphosphorylated and redistributed in herpes simplex virus type 1-infected cells in a manner dependent on both UL34 and US3. *J. Virol.* 81: 10792-10803.

## 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.

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Satisfaction  
Guaranteed

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