

Emerin (D9B3) Rabbit mAb

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com

Support ■ 877-678-TECH (8324)
info@cellsignal.com

Web ■ www.cellsignal.com

rev. 02/01/16

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W, IP Endogenous	Species Cross-Reactivity* H	Molecular Wt. 30 kDa	Isotype Rabbit IgG**
-------------------------------------	--------------------------------	-------------------------	-------------------------

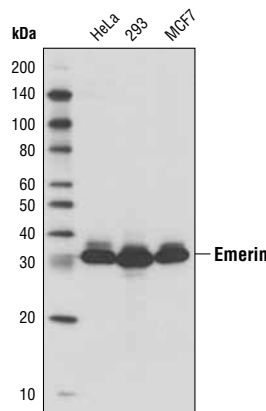
Background: Emerin is a broadly expressed integral protein of the nuclear inner membrane (1). It contains a LEM domain and binds to several nuclear proteins, such as BAF (barrier-to-autointegration factor) and A- and B-type lamins, which are important in nuclear functions (2-5). Emerin may regulate gene expression through binding to other transcriptional regulators (6,7). Emerin binds to β -catenin and inhibits its nuclear accumulation (8). Recent studies demonstrate that Emerin is required for HIV-1 infectivity (9). Mutations in Emerin are a major cause of Emery-Dreifuss muscular dystrophy (EDMD), a disorder characterized by progressive skeletal muscle weakening (10).

Specificity/Sensitivity: Emerin (D9B3) Rabbit mAb detects endogenous level of total Emerin protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human Emerin protein.

Background References:

- (1) Nagano, A. et al. (1996) *Nat. Genet.* 12, 254-259.
- (2) Manilal, S. et al. (1998) *Biochem. Biophys. Res. Commun.* 249, 643-647.
- (3) Clements, L. et al. (2000) *Biochem. Biophys. Res. Commun.* 267, 709-714.
- (4) Lee, K.K. et al. (2001) *J. Cell Sci.* 114, 4567-4573.
- (5) Bengtsson, L. and Wilson, K.L. (2006) *Mol. Biol. Cell* 17, 1154-1163.
- (6) Holaska, J.M. et al. (2003) *J. Biol. Chem.* 278, 6969-6975.
- (7) Haraguchi, T. et al. (2004) *Eur. J. Biochem.* 271, 1035-1045.
- (8) Markiewicz, E. et al. (2006) *EMBO J.* 25, 3275-3285.
- (9) Jacque, J.M. and Stevenson, M. (2006) *Nature* 441, 641-645.
- (10) Holaska, J.M. and Wilson, K.L. (2006) *Anat. Rec. A Discov. Mol. Cell. Evol. Biol.* 288, 676-680.



Western blot analysis of extracts from HeLa, 293, and MCF7 cell lines using Emerin (D9B3) Rabbit mAb.

Entrez-Gene ID #2010
Swiss-Prot Acc. #P50402

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C . Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA—Peptide

Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine

Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse

All—all species expected

Species enclosed in parentheses are predicted to react based on 100% homology.