#2660 Store at –20°C

Emerin (A212) Antibody

☑ 100 µl
(10 western blots)

Cell Signaling TECHNOLOGY®

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rev. 1/20/10

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

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

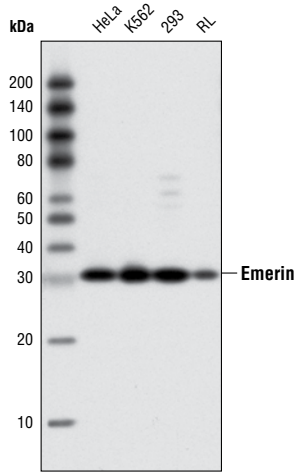
Background: Emerin is a broadly expressed integral protein of the nuclear inner membrane (1). It contains a LEM domain and binds to several nuclear proteins, such as BAF (barrier-to-autointegration factor) and A- and B-type lamins, which are important in nuclear functions (2-5). Emerin may regulate gene expression through binding to other transcriptional regulators (6,7). Emerin binds to β-catenin and inhibits its nuclear accumulation (8). Recent studies demonstrated 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 (A212) Antibody detects endogenous levels of total Emerin protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (KLH-coupled) corresponding to residues surrounding Ala212 of human Emerin. Antibodies are purified by peptide affinity chromatography.

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 various cell types using Emerin (A212) Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. 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.