

Store at
-20°C

#15068

Lamin B1 (D9V6H) Rabbit mAb (HRP Conjugate)

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UniProt ID #P20700

New 06/15

For Research Use Only. Not For Use In Diagnostic Procedures.**Applications
W
Endogenous****Species Cross-Reactivity
H, M, R, (B, Dg, Pg)****Molecular Wt.
68,45 kDa****Isotype
Rabbit IgG**

Description: This Cell Signaling Technology antibody is conjugated to the carbohydrate groups of horseradish peroxidase (HRP) via its amine groups. The HRP conjugated antibody is expected to exhibit the same species cross-reactivity as the unconjugated Lamin B1 (D9V6H) Rabbit mAb #13435.

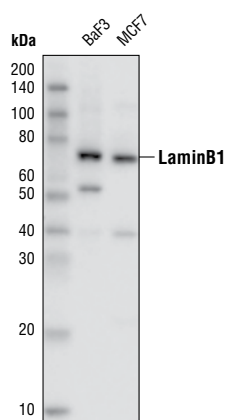
Background: Lamins are nuclear membrane structural components that are important in maintaining normal cell functions, such as cell cycle control, DNA replication, and chromatin organization (1-3). Lamins have been subdivided into types A and B. Type-A lamins consist of lamin A and C, which arise from alternative splicing of the lamin A gene *LMNA*. Lamin A and C are cleaved by caspases into large (41-50 kDa) and small (28 kDa) fragments, which can be used as markers for apoptosis (4,5). Type-B lamins consist of lamin B1 and B2, encoded by separate genes (6-8). Lamin B1 is also cleaved by caspases during apoptosis (9). Research studies have shown that duplication of the lamin B1 gene *LMNB1* is correlated with pathogenesis of the neurological disorder adult-onset leukodystrophy (10).

Specificity/Sensitivity: Lamin B1 (D9V6H) Rabbit mAb (HRP Conjugate) recognizes endogenous levels of total lamin B1 protein. This antibody recognizes the 45 kDa lamin B1 carboxy terminal cleavage product produced during apoptosis.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Lys415 of human lamin B1 protein.

Background References:

- (1) Gruenbaum, Y. et al. (2000) *J Struct Biol* 129, 313-23.
- (2) Goldberg, M. et al. (1999) *Crit Rev Eukaryot Gene Expr* 9, 285-93.
- (3) Yabuki, M. et al. (1999) *Physiol Chem Phys Med NMR* 31, 77-84.
- (4) Rao, L. et al. (1996) *J Cell Biol* 135, 1441-55.
- (5) Orth, K. et al. (1996) *J Biol Chem* 271, 16443-6.
- (6) Biamonti, G. et al. (1992) *Mol Cell Biol* 12, 3499-506.
- (7) Lin, F. and Worman, H.J. (1995) *Genomics* 27, 230-6.
- (8) Pollard, K.M. et al. (1990) *Mol Cell Biol* 10, 2164-75.
- (9) Chandler, J.M. et al. (1997) *Biochem J* 322 (Pt 1), 19-23.
- (10) Padiath, Q.S. et al. (2006) *Nat Genet* 38, 1114-23.



Western blot analysis of extracts from BaF3 and MCF7 cells using Lamin B1 (D9V6H) Rabbit mAb (HRP Conjugate).

Storage: Supplied in 136 mM NaCl, 2.6 mM KCl, 12 mM sodium phosphate (pH 7.4) dibasic, 2 mg/ml BSA, and 50% glycerol. Store at -20°C. *Do not aliquot the antibodies.*

HRP-conjugated antibodies do not require incubation with a secondary antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide **Species Cross-Reactivity:** 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.