

Lamin B1 (D9V6H) Rabbit mAb (HRP Conjugate)

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

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	68,45	Rabbit IgG	#P20700	4001

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

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.

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.

Species predicted to react based on 100% sequence homology

Bovine, Dog, Pig

Source / Purification

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

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).

Background References

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

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.