

Store at
-20C
#44006**MSL2 (D4V2N) Rabbit mAb**

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, IP	H M R Mk	Endogenous	80	Rabbit IgG	#Q9HCI7	55167

Product Usage Information**Application**

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

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

Specificity/Sensitivity

MSL2 (D4V2N) Rabbit mAb recognizes endogenous levels of total MSL2 protein.

Species predicted to react based on 100% sequence homology

Bovine, Dog, Pig, Horse

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro210 of human MSL2 protein.

Background

Male-specific lethal 2-homolog (MSL2) is a component of the male-specific lethal (MSL) histone acetyltransferase complex, which contains MSL1, MSL2, MSL3, and MYST1. MYST1, also known as mammalian male absent on the first (MOF) and lysine acetyltransferase 8 (KAT8), is a member of the MYST (MOZ, YBF2, SAS2, and Tip60) family of histone acetyltransferases (1,2) and functions as the catalytic subunit of the MSL complex. The MSL complex is responsible for the majority of acetylation on histone H4 lysine 16 (3-5). In addition, as part of the MSL complex, MSL1 and MSL2 function as an E3 ubiquitin ligase to mono-ubiquitylate histone H2B on lysine 34 (6). The MSL complex plays a critical role in the regulation of transcription, DNA repair, autophagy, apoptosis, and embryonic stem cell pluripotency and differentiation (1,2,6,7). Loss of MSL activity leads to a global reduction in histone H4 lysine 16 acetylation, a common hallmark found in many human cancers. In particular, the reduction of MYST1 protein levels and histone H4 lysine 16 acetylation is associated with poor prognosis in breast, renal, colorectal, gastric, and ovarian cancers (1).

Background References

1. Yang, Y. et al. (2014) *Front Med* 8, 79-83.
2. Li, X. and Dou, Y. (2010) *Epigenetics* 5, 185-8.
3. Dou, Y. et al. (2005) *Cell* 121, 873-85.
4. Li, X. et al. (2009) *Mol Cell* 36, 290-301.
5. Cai, Y. et al. (2010) *J Biol Chem* 285, 4268-72.
6. Wu, L. et al. (2011) *Mol Cell* 43, 132-44.
7. Füllgrabe, J. et al. (2013) *Nature* 500, 468-71.

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 BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

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

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.