

**HECTH9 (AX8D1) Mouse 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	H M R Mk	Endogenous	482	Mouse IgG1	#Q7Z6Z7	10075

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**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**

HECTH9 (AX8D1) Mouse mAb recognizes endogenous levels of total HECTH9 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a recombinant protein specific to human HECTH9 protein.

**Background**

The HECT domain-containing ubiquitin E3 ligase HECTH9 (also known as HUWE1, ARF-BP1, URE-B1, Mule, and LASU1) is critical for the ubiquitination and proteasomal degradation of many target proteins, and is involved in the regulation of a variety of cellular processes, including DNA replication and base excision repair, cellular proliferation, differentiation, and apoptosis. HECTH9 contains two Armadillo (ARM) repeat-like domains (ARLD1 and ARLD2), a ubiquitin-associated (UBA) domain, a WWE domain, a well-conserved BH3 domain, and a catalytic HECT domain that facilitates ubiquitination of target proteins. HECTH9 has been shown to polyubiquitinate p53 (1,2), Miz1 (3), N-Myc (4,5), Mcl-1 (6), Cdc 6 (7), and DNA polymerase beta (8) through K48-mediated linkage, thereby targeting these proteins for proteasomal degradation. The tumor suppressor protein ARF (known as p14 ARF in humans and p19 ARF in mice) binds to and inhibits the ubiquitin ligase activity toward p53, resulting in stabilization of p53 and induction of apoptosis (1). HECTH9 has also been shown to polyubiquitinate c-Myc through K63-linkage, which is required for recruitment of p300, activation of c-Myc target genes, and induction of cellular proliferation (9). HECTH9 is overexpressed in colon, lung, and breast cancer (1,9). In addition, defects in HECTH9 result in mental retardation syndromic X-linked Turner type (MRXST) and mental retardation X-linked type 17 (MRX17) syndromes (10).

**Background References**

1. Chen, D. et al. (2005) *Cell* 121, 1071-83.
2. Yoon, S.Y. et al. (2005) *Biochem Biophys Res Commun* 326, 7-17.
3. Yang, Y. et al. (2010) *Proc Natl Acad Sci U S A* 107, 13444-9.
4. Zhao, X. et al. (2008) *Nat Cell Biol* 10, 643-53.
5. Zhao, X. et al. (2009) *Dev Cell* 17, 210-21.
6. Zhong, Q. et al. (2005) *Cell* 121, 1085-95.
7. Hall, J.R. et al. (2007) *Mol Biol Cell* 18, 3340-50.
8. Parsons, J.L. et al. (2009) *EMBO J* 28, 3207-15.
9. Adhikary, S. et al. (2005) *Cell* 123, 409-21.
10. Froyen, G. et al. (2008) *Am J Hum Genet* 82, 432-43.

**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 **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](http://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.