

#5054 Store at -20°C

## Argonaute 3 (D15D2) 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:
WB, IP	H M Mk	Endogenous	97	Rabbit IgG	#Q9H9G7	192669

### 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

Argonaute 3 (D15D2) Rabbit mAb recognizes endogenous levels of total Argonaute 3 protein.

### Species predicted to react based on 100% sequence homology:

Rat

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val160 of human Argonaute 3 protein.

### Background

Small non-coding RNAs are important regulators of gene expression in higher eukaryotes (1,2). Several classes of small RNAs, including short interfering RNAs (siRNAs) (3), microRNAs (miRNAs) (4), and Piwi-interacting RNAs (piRNAs) (5), have been identified. miRNAs are about 21 nucleotides in length and have been implicated in many cellular processes, such as development, differentiation, and stress response (1,2). miRNAs regulate gene expression by modulating mRNA translation or stability (2). miRNAs function together with the protein components in the complexes called micro-ribonucleoproteins (miRNPs) (2). Among the most important components in these complexes are Argonaute proteins (1,2). There are four members in the mammalian Argonaute family, and only Argonaute 2 (Ago2) possesses the Slicer endonuclease activity (1,2). Argonaute proteins participate in the various steps of miRNA-mediated gene silencing, such as repression of translation and mRNA turnover (1).

### Background References

1. Peters, L. and Meister, G. (2007) *Mol Cell* 26, 611-23.
2. Filipowicz, W. et al. (2008) *Nat Rev Genet* 9, 102-14.
3. Caplen, N.J. et al. (2001) *Proc Natl Acad Sci USA* 98, 9742-7.
4. Mourelatos, Z. et al. (2002) *Genes Dev* 16, 720-8.
5. Girard, A. et al. (2006) *Nature* 442, 199-202.

### 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

**WB:** Western Blotting **IP:** Immunoprecipitation

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

### 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.