

#51345 Store at -20C

**RPL5 (D5Q5X) Rabbit mAb****Cell Signaling**  
TECHNOLOGY®**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	H Mk	Endogenous	34	Rabbit IgG	#P46777	6125

**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**

RPL5 (D5Q5X) Rabbit mAb recognizes endogenous levels of total RPL5 protein.

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

Bovine, Pig, Horse

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gln122 of human RPL5 protein.

**Background**

Ribosomal protein L5 (RPL5) is one of several proteins that comprise the 60S ribosomal subunit. RPL5 binds 5S rRNA and the nucleolar RPL11 protein to form the 5S ribonucleoprotein particle (RNP) that is incorporated into the large 60S ribosomal subunit (1). An RP-MDM2-p53 protein complex that contains ribosomal proteins RPL5, RPL11, and RPL23 acts as a nucleolar stress sensor that binds and inhibits MDM2 ubiquitin ligase activity and enhances p53-mediated transcriptional activity (2,3). RPL5 cooperates with RPL11 to influence ribosome biogenesis through regulating expression of the transcription factor c-Myc, which acts as the master regulator of ribosome biogenesis (4). Mutations in the corresponding *RPL5* gene are associated with Diamond-Blackfan anemia, which is a form of red blood cell aplasia, and some cases of pediatric T-cell acute lymphoblastic leukemia (5,6).

**Background References**

1. Zhang, J. et al. (2007) *Genes Dev* 21, 2580-92.
2. Horn, H.F. and Vousden, K.H. (2008) *Oncogene* 27, 5774-84.
3. Dai, M.S. and Lu, H. (2004) *J Biol Chem* 279, 44475-82.
4. Liao, J.M. et al. (2013) *Oncogene*, [Epub ahead of print].
5. Avondo, F. et al. (2009) *BMC Genomics* 10, 442.
6. De Keersmaecker, K. et al. (2013) *Nat Genet* 45, 186-90.

**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**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 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.