

Store at  
-20C  
#69575**Nucleolin (D4C7O) 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 Mk	Endogenous	100	Rabbit IgG	#P19338	4691

**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 antibody.

**Specificity/Sensitivity**

Nucleolin (D4C7O) Rabbit mAb recognizes endogenous levels of total nucleolin protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly53 of human nucleolin 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 Nucleolin (D4C7O) Rabbit mAb #14574.

**Background**

Nucleolin is a multi-functional protein that is one of the major components of the nucleoli (1). Nucleolin plays an essential role in various steps of ribosome biogenesis including rRNA synthesis, processing of pre-rRNA, pre-ribosomal RNA assembly, and transport of ribosomal proteins out of the nucleus (1-3). While the main function of nucleolin is ribosome biogenesis, it plays an important role in various other nuclear activities. Down regulation of nucleolin leads to increased expression of p53, defects in genome duplication, and a delay at prometaphase during mitosis leading to cell cycle arrest (4-6). In addition, nucleolin has been found in a complex with Rad51 and may participate in DNA repair by homologous recombination (7). Nucleolin binds to the catalytic subunit of the human telomerase reverse transcriptase, hTERT, and is thought to be involved in telomere maintenance (8). Nucleolin also possesses histone chaperone activity and is able to enhance the chromatin remodeling efficiency of SWItch/Sucrose Non Fermentable (SWI/SNF) and ATP-dependent chromatin-assembly factor (ACF), remove histone H2A-H2B dimers from nucleosomes, and facilitate the passage of RNA polymerase through chromatin (9).

**Background References**

1. Tajrishi, M.M. et al. (2011) *Commun Integr Biol* 4, 267-75.
2. Ginisty, H. et al. (1999) *J Cell Sci* 112 ( Pt 6), 761-72.
3. Srivastava, M. and Pollard, H.B. (1999) *FASEB J* 13, 1911-22.
4. Takagi, M. et al. (2005) *Cell* 123, 49-63.
5. Ugrinova, I. et al. (2007) *BMC Mol Biol* 8, 66.
6. Ma, N. et al. (2007) *J Cell Sci* 120, 2091-105.
7. De, A. et al. (2006) *Biochem Biophys Res Commun* 344, 206-13.
8. Khurts, S. et al. (2004) *J Biol Chem* 279, 51508-15.
9. Angelov, D. et al. (2006) *EMBO J* 25, 1669-79.

**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.