

Store at -20C
#4839**RecQL1 (Q1N3) Mouse mAb**

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, IF-IC	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 70	Source/Isotype: Mouse IgG1	UniProt ID: #P46063	Entrez-Gene Id: 5965
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Product Usage Information**Application**

Western Blotting
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:80

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

RecQL1 (Q1N3) Mouse mAb detects endogenous levels of total RecQL1 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with human RecQL1 recombinant protein.

Background

The RecQ family is a group of DNA helicases that play an important role in global genomic stability (1). Mutations in three of the five known human RecQ proteins (BLM, WRN and RECQL4) give rise to clinically distinct disorders that are characterized by features such as premature aging and predisposition to cancer (2,3). The clinical distinction of each disease associated with these mutations points to distinct roles that members of this helicase family play in DNA metabolism. RecQL1 is the most abundant protein of the RecQ family and was the first family member to be discovered. No disease associations have been reported with RecQL1 and its biological activities are not well understood (4). It has recently been shown that depletion of RecQL1 negatively affects genomic maintenance and cellular proliferation - which may point to a role in DNA damage repair and cell cycle progression (5,6). Upregulation of RecQL1 along with other RecQ family members has been reported in cells in response to oncogenic viral infection (7).

Background References

1. Chu, W.K. and Hickson, I.D. (2009) *Nat Rev Cancer* 9, 644-54.
2. Hanada, K. and Hickson, I.D. (2007) *Cell Mol Life Sci* 64, 2306-22.
3. Dietschy, T. et al. (2007) *Cell Mol Life Sci* 64, 796-802.
4. Seki, M. et al. (1994) *J Biochem* 115, 523-31.
5. Sharma, S. and Brosh, R.M. (2007) *PLoS One* 2, e1297.
6. Sharma, S. and Brosh, R.M. (2008) *Cell Cycle* 7, 989-1000.
7. Kawabe, T. et al. (2000) *Oncogene* 19, 4764-72.

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 **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: Human

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