

#14365 Store at -20°C

Rab38 (D2V9Z) Rabbit mAb**Cell Signaling**
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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 R	Endogenous	23	Rabbit IgG	#P57729	23682

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

Rab38 (D2V9Z) Rabbit mAb recognizes endogenous levels of total Rab38 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu114 of human Rab38 protein.

Background

Rab38 is a member of the Rab small G protein family and is mainly expressed in lung alveolar type II cells and melanocytes (1,2). In mice, the G146T Rab38 gene mutation results in loss of Rab38 function and causes abnormal pigmentation due to the loss of melanosomes (3). The Rab38 gene locus has been mapped to oculocutaneous albinism in Ruby rats, a model of human Hermansky-Pudlak Syndrome (4). Analysis of lung structure in the G146T mutation in mice and the Rab38 null mutation in rats also revealed an altered lung surfactant system with enlarged lamellar bodies in type II cells, indicating a role for Rab38 in lung function and development (5,6). Dysfunction mutation studies implicate Rab38 in the post-Golgi trafficking of enzymes (e.g. TYRP1) related to melanogenesis and stability (7,8).

Background References

1. Jäger, D. et al. (2000) *Cancer Res* 60, 3584-91.
2. Osanai, K. et al. (2001) *Am J Pathol* 158, 1665-75.
3. Loftus, S.K. et al. (2002) *Proc Natl Acad Sci USA* 99, 4471-6.
4. Oiso, N. et al. (2004) *Mamm Genome* 15, 307-14.
5. Osanai, K. et al. (2008) *Am J Pathol* 173, 1265-74.
6. Osanai, K. et al. (2010) *Am J Physiol Lung Cell Mol Physiol* 298, L243-51.
7. Wasmeier, C. et al. (2006) *J Cell Biol* 175, 271-81.
8. Lopes, V.S. et al. (2007) *Mol Biol Cell* 18, 3914-27.

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**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

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