

#8975 Store at -20C

LAMTOR1/C11orf59 (D11H6) XP® Rabbit mAb



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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IHC-P, IF-IC	H M R Mk	Endogenous	18	Rabbit IgG	#Q6IAA8	55004

Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:50
1:100 - 1:400
1:50 - 1:200

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.

For a carrier free (BSA and azide free) version of this product see product #87786.

Specificity / Sensitivity

LAMTOR1/C11orf59 (D11H6) XP® Rabbit mAb recognizes endogenous levels of total LAMTOR1/C11orf59 protein. This antibody may cross-react with LAMTOR2/ROBLD3 and LAMTOR3/MAPKSP1.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala71 of human LAMTOR1/C11orf59 protein.

Background

mTORC1 kinase complex is a critical component in the regulation of cell growth (1,2). Its activity is modulated by energy levels, growth factors, and amino acids (3,4). The four related GTPases, RagA, RagB, RagC, and RagD, have been shown to interact with raptor in mTORC1 (1,2). These interactions are both necessary and sufficient for mTORC1 activation in response to amino acid signals (1,2). A protein complex consisting of LAMTOR1/C11orf59, LAMTOR2/ROBLD3, and LAMTOR3/MAPKSP1 has been identified to interact with and recruit the four Rag GTPases to the surface of lysosomes (5).

Background References

1. Sancak, Y. et al. (2008) *Science* 320, 1496-501.
2. Kim, E. et al. (2008) *Nat Cell Biol* 10, 935-45.
3. Hay, N. and Sonenberg, N. (2004) *Genes Dev* 18, 1926-45.
4. Wullschlegel, S. et al. (2006) *Cell* 124, 471-84.
5. Sancak, Y. et al. (2010) *Cell* 141, 290-303.

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 **IHC-P:** Immunohistochemistry (Paraffin)
IF-IC: Immunofluorescence (Immunocytochemistry)

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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