

**URM1 Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM1883a**

**Specification**

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**URM1 Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">O9BTM9</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgM,K
Calculated MW	11380

**URM1 Antibody - Additional Information**

**Gene ID** 81605

**Other Names**

Ubiquitin-related modifier 1 {ECO:0000255|HAMAP-Rule:MF\_03048}, URM1 {ECO:0000255|HAMAP-Rule:MF\_03048}, C9orf74

**Target/Specificity**

This URM1 monoclonal antibody is generated from mouse immunized with URM1 recombinant protein.

**Dilution**

WB~~1:100

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Euglobin precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

URM1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**URM1 Antibody - Protein Information**

**Name** URM1 {ECO:0000255|HAMAP-Rule:MF\_03048}

**Synonyms** C9orf74

**Function** Acts as a sulfur carrier required for 2-thiolation of mcm(5)S(2)U at tRNA wobble positions of cytosolic tRNA(Lys), tRNA(Glu) and tRNA(Gln). Serves as sulfur donor in tRNA

2-thiolation reaction by being thiocarboxylated (-COSH) at its C-terminus by MOCS3. The sulfur is then transferred to tRNA to form 2-thiolation of mcm(5)S(2)U. Also acts as a ubiquitin-like protein (UBL) that is covalently conjugated via an isopeptide bond to lysine residues of target proteins such as MOCS3, ATPBD3, CTU2, USP15 and CAS. The thiocarboxylated form serves as substrate for conjugation and oxidative stress specifically induces the formation of UBL-protein conjugates.

#### Cellular Location

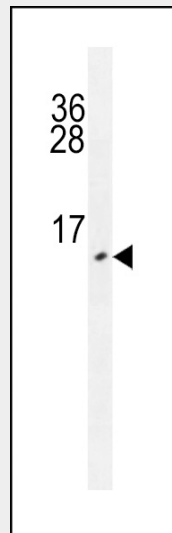
Cytoplasm.

#### URM1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### URM1 Antibody - Images



URM1 antibody (Cat. #AM1883a) western blot analysis in HepG2 cell line lysates (35µg/lane). This demonstrates the URM1 antibody detected the URM1 protein (arrow).

#### URM1 Antibody - Background

Acts as a sulfur carrier required for 2-thiolation of mcm(5)S(2)U at tRNA wobble positions of tRNA(Lys), tRNA(Glu) and tRNA(Gln). Serves as sulfur donor in tRNA 2-thiolation reaction by thiocarboxylated (-COSH) at its C-terminus by MOCS3. The sulfur is then transferred to tRNA to form 2-thiolation of mcm(5)S(2)U. May also act as an ubiquitin-like protein that is covalently conjugated to other proteins; the relevance of such function is however unclear in vivo.

#### URM1 Antibody - References

Schlieker, C.D., et al. Proc. Natl. Acad. Sci. U.S.A. 105(47):18255-18260(2008)  
Schmitz, J., et al. Biochemistry 47(24):6479-6489(2008)  
Xu, J., et al. Proc. Natl. Acad. Sci. U.S.A. 103(31):11625-11630(2006)  
Singh, S., et al. Protein Sci. 14(8):2095-2102(2005)  
Humphray, S.J., et al. Nature 429(6990):369-374(2004)