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URM1 Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1601a

Specification

URM1 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q9BTM9
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**11380**
Antigen Region	**8-40**

URM1 Antibody (N-term) - 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 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 8-40 amino acids from the N-terminal region of human URM1.

Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) 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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

URM1 Antibody (N-term) - 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.

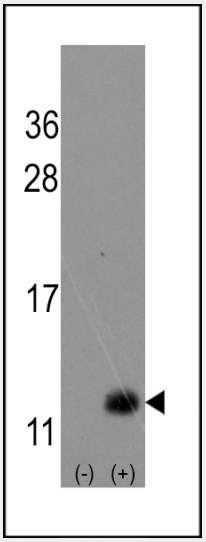
Cellular Location
Cytoplasm.

URM1 Antibody (N-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

URM1 Antibody (N-term) - Images



Western blot analysis of hURM1 (arrow) using rabbit polyclonal hURM1 Antibody (N-term) (Cat.#AP1601a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the hURM1 gene (Lane 2) (Origene Technologies).

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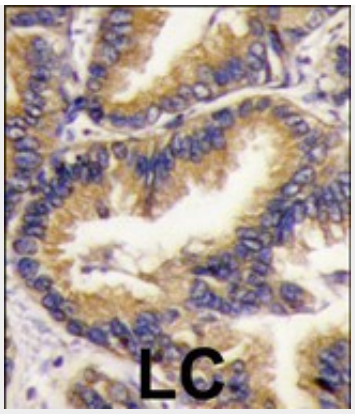

Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with URM1 Antibody (N-term)(Cat.#AP1601a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

URM1 Antibody (N-term) - Background

Following the discovery of protein modification by the small, highly conserved ubiquitin polypeptide, a number of distinct ubiquitin-like proteins (Ubls) have been found to function as protein modifiers as well. These Ubls, which include SUMO, ISG15, Nedd8, and Atg8, function as critical regulators of many cellular processes, including transcription, DNA repair, signal transduction, autophagy, and cell-cycle control. A growing body of data also implicates the dysregulation of Ubl-substrate modification and mutations in the Ubl-conjugation machinery in the etiology and progression of a number of human diseases. URM1 is a ubiquitin-like modifier protein.

URM1 Antibody (N-term) - References

Humphray S.J., Nature 429:369-374(2004).
The MGC Project Team., Genome Res. 14:2121-2127(2004).