

URM1 Blocking Peptide (N-term)
Synthetic peptide
Catalog # BP1601a**Specification**

URM1 Blocking Peptide (N-term) - Product InformationPrimary Accession [Q9BTM9](#)**URM1 Blocking Peptide (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**

The synthetic peptide sequence is selected from aa 23-40 of HUMAN URM1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

URM1 Blocking Peptide (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 Blocking Peptide (N-term) - Protocols

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

- [Blocking Peptides](#)

URM1 Blocking Peptide (N-term) - Images

URM1 Blocking Peptide (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 Blocking Peptide (N-term) - References

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