10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# CL029 Antibody (N-term) Blocking peptide

**Synthetic peptide**
**Catalog # BP11154a**

## Specification

### CL029 Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q8N999

### CL029 Antibody (N-term) Blocking peptide - Additional Information

**Gene ID** 91298

**Other Names**
Uncharacterized protein C12orf29, C12orf29

**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.

### CL029 Antibody (N-term) Blocking peptide - Protein Information

**Name** RLIG1 (HGNC:25322)

**Function**
Functions as an RNA ligase, in vitro (PubMed:<a href="http://www.uniprot.org/citations/36792600" target="_blank">36792600</a>). The ligation reaction entails three nucleotidyl transfer steps (PubMed:<a href="http://www.uniprot.org/citations/36792600" target="_blank">36792600</a>). In the first step, the RNA ligase reacts with ATP in the absence of nucleic acid to form a covalent ligase-AMP intermediate and release pyrophosphate (PubMed:<a href="http://www.uniprot.org/citations/36792600" target="_blank">36792600</a>). In step 2, the ligase-AMP binds to the nucleic acid and transfers the adenylate to the 5'-PO4 terminus to form an adenylylated intermediate (PubMed:<a href="http://www.uniprot.org/citations/36792600" target="_blank">36792600</a>). In step 3, the RNA ligase directs the attack of the 3'-OH on the 5'- phosphoanhydride linkage, resulting in a repaired 3'-5' phosphodiester and release of AMP (PubMed:<a href="http://www.uniprot.org/citations/36792600" target="_blank">36792600</a>). Exhibits selectivity for single- stranded RNA substrates and may not have nick-sealing activity on double-stranded DNA-RNA hybrids (PubMed:<a href="http://www.uniprot.org/citations/36792600" target="_blank">36792600</a>). May play a role in maintaining RNA integrity under stress conditions, for example in response to reactive oxygen species (ROS) (PubMed:<a href="http://www.uniprot.org/citations/36792600" target="_blank">36792600</a>).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

## CL029 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

## CL029 Antibody (N-term) Blocking peptide - Images

## CL029 Antibody (N-term) Blocking peptide - Background

May be required for endoplasmic reticulum organization (By similarity).

## CL029 Antibody (N-term) Blocking peptide - References

Mehrle, A., et al. Nucleic Acids Res. 34 (DATABASE ISSUE), D415-D418 (2006) :Wiemann, S., et al. Genome Res. 14 (10B), 2136-2144 (2004) :