

C7orf49 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP13615a**Specification**

C7orf49 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [Q9BWK5](#)**C7orf49 Antibody (N-term) Blocking peptide - Additional Information**

Gene ID 78996

Other Names

Modulator of retrovirus infection homolog, MRI, C7orf49

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13615a was selected from the N-term region of C7orf49. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

C7orf49 Antibody (N-term) Blocking peptide - Protein InformationName CYREN ([HGNC:22432](#))**Function**

Cell-cycle-specific regulator of classical non-homologous end joining (NHEJ) of DNA double-strand break (DSB) repair, which can act both as an activator or inhibitor of NHEJ, depending on the cell cycle phase (PubMed: [24610814](http://www.uniprot.org/citations/24610814), PubMed: [28959974](http://www.uniprot.org/citations/28959974)). Acts as a regulator of DNA repair pathway choice by specifically inhibiting classical NHEJ during the S and G2 phases, thereby promoting error-free repair by homologous recombination during cell cycle phases when sister chromatids are present (PubMed: [28959974](http://www.uniprot.org/citations/28959974)). Preferentially protects single-stranded overhangs at break sites by inhibiting classical NHEJ, thereby creating a local environment that favors homologous recombination (PubMed: [28959974](http://www.uniprot.org/citations/28959974)). Acts via interaction with XRCC5/Ku80 and XRCC6/Ku70 (PubMed: [28959974](http://www.uniprot.org/citations/28959974)). In contrast,

acts as an activator of NHEJ during G1 phase of the cell cycle: promotes classical NHEJ in G1 phase cells via multivalent interactions that increase the affinity of DNA damage response proteins for DSB-associated chromatin. Also involved in immunoglobulin V(D)J recombination (By similarity). May also act as an indirect regulator of proteasome (By similarity).

Cellular Location

[Isoform 1]: Cytoplasm. Nucleus Chromosome. Note=Nuclear localization may depend upon interaction with XRCC5/Ku80 and XRCC6/Ku70 heterodimer (PubMed:24610814). Localizes to DNA damage sites (PubMed:27063109) [Isoform 4]: Cytoplasm. Nucleus Note=Nuclear localization may depend upon interaction with XRCC5/Ku80 and XRCC6/Ku70 heterodimer and increases upon etoposide treatment

C7orf49 Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

C7orf49 Antibody (N-term) Blocking peptide - Images**C7orf49 Antibody (N-term) Blocking peptide - Background**

C7orf49 may act as a regulator of proteasome (By similarity).

C7orf49 Antibody (N-term) Blocking peptide - References

Agarwal, S., et al. Proc. Natl. Acad. Sci. U.S.A. 103(43):15933-15938(2006)