

**DDX50 Antibody (N-term) Blocking Peptide**  
Synthetic peptide  
Catalog # BP8763a**Specification****DDX50 Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q9BQ39](#)**DDX50 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 79009**Other Names**

ATP-dependent RNA helicase DDX50, DEAD box protein 50, Gu-beta, Nucleolar protein Gu2, DDX50

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8763a](#) was selected from the N-term region of human DDX50. 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.

**DDX50 Antibody (N-term) Blocking Peptide - Protein Information****Name** DDX50**Function**

ATP-dependent RNA helicase that may play a role in various aspects of RNA metabolism including pre-mRNA splicing or ribosomal RNA production (PubMed:[12027455](http://www.uniprot.org/citations/12027455)). Also acts as a viral restriction factor and promotes the activation of the NF-kappa-B and IRF3 signaling pathways following its stimulation with viral RNA or infection with RNA and DNA viruses (PubMed:[35215908](http://www.uniprot.org/citations/35215908)). For instance, decreases vaccinia virus, herpes simplex virus, Zika virus or dengue virus replication during the early stage of infection (PubMed:[28181036](http://www.uniprot.org/citations/28181036), PubMed:[35215908](http://www.uniprot.org/citations/35215908)). Mechanistically, acts via the adapter TICAM1 and independently of the DDX1-DDX21-DHX36 helicase complex to induce the production of interferon-beta

(PubMed:<a href="http://www.uniprot.org/citations/35215908" target="\_blank">35215908</a>).

**Cellular Location**

Nucleus, nucleolus. Cytoplasm Note=Accumulates in the cytoplasm to activate signaling upstream of IRF3 during viral infection.

**Tissue Location**

Highest expression in skeletal muscle, liver, heart, placenta, and kidney.

**DDX50 Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**DDX50 Antibody (N-term) Blocking Peptide - Images****DDX50 Antibody (N-term) Blocking Peptide - Background**

DDX50 belongs to the RNA helicase family of proteins involved in unwinding double-stranded RNA during transcription and pre-mRNA splicing, ribosomal RNA synthesis, translation, RNA transport, and RNA stability and degradation. RNA helicases have an Asp-Glu-Ala-Asp (DEAD) motif within the catalytic domain, which gives the family its name (Valdez et al., 2002).

**DDX50 Antibody (N-term) Blocking Peptide - References**

Dephoure N., et.al., Proc. Natl. Acad. Sci. U.S.A. 105:10762-10767(2008).Scherl A.,et.al., Mol. Biol. Cell 13:4100-4109(2002).