

DCK Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7087a**Specification**

DCK Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P27707](#)**DCK Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 1633**Other Names**

Deoxycytidine kinase, dCK, DCK

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7087a](/product/products/AP7087a) was selected from the N-term region of human DCK. 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.

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

Phosphorylates the deoxyribonucleosides deoxycytidine, deoxyguanosine and deoxyadenosine (PubMed: [1996353](http://www.uniprot.org/citations/1996353), PubMed: [12808445](http://www.uniprot.org/citations/12808445), PubMed: [18377927](http://www.uniprot.org/citations/18377927), PubMed: [19159229](http://www.uniprot.org/citations/19159229), PubMed: [20614893](http://www.uniprot.org/citations/20614893), PubMed: [20637175](http://www.uniprot.org/citations/20637175)). Has broad substrate specificity, and does not display selectivity based on the chirality of the substrate. It is also an essential enzyme for the phosphorylation of numerous nucleoside analogs widely employed as antiviral and chemotherapeutic agents (PubMed: [12808445](http://www.uniprot.org/citations/12808445)).

Cellular Location

Nucleus.

DCK Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

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

Deoxycytidine kinase is responsible for the phosphorylation of several deoxyribonucleosides and their analogs. Deficiency of this enzyme activity is associated with resistance to antiviral and anticancer chemotherapeutic agents, whereas increased enzyme activity is associated with increased activation of these compounds to cytotoxic nucleoside triphosphate derivatives. It is the rate limiting enzyme in the activation of many important anticancer and retroviral drugs and its activity is often decreased in cells that are resistant to cytosine arabinoside.

DCK Antibody (N-term) Blocking Peptide - References

Chottiner, E. G., et al. Proc. Nat. Acad. Sci. 88: 1531-1535 (1991).