

### **DHFR Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP7378c

### **Specification**

## **DHFR Antibody (Center) Blocking Peptide - Product Information**

**Primary Accession** 

P00374

# **DHFR Antibody (Center) Blocking Peptide - Additional Information**

**Gene ID 1719** 

#### **Other Names**

Dihydrofolate reductase, DHFR

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP7378c>AP7378c</a> was selected from the Center region of human DHFR. 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.

# **DHFR Antibody (Center) Blocking Peptide - Protein Information**

# Name DHFR

### **Function**

Key enzyme in folate metabolism. Contributes to the de novo mitochondrial thymidylate biosynthesis pathway. Catalyzes an essential reaction for de novo glycine and purine synthesis, and for DNA precursor synthesis. Binds its own mRNA and that of DHFR2.

#### **Cellular Location**

Mitochondrion {ECO:0000250|UniProtKB:P00375}. Cytoplasm {ECO:0000250|UniProtKB:P00375}

### **Tissue Location**

Widely expressed in fetal and adult tissues, including throughout the fetal and adult brains and whole blood Expression is higher in the adult brain than in the fetal brain



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# **DHFR Antibody (Center) Blocking Peptide - Protocols**

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

### • Blocking Peptides

**DHFR Antibody (Center) Blocking Peptide - Images** 

# **DHFR Antibody (Center) Blocking Peptide - Background**

Dihydrofolate reductase converts dihydrofolate into tetrahydrofolate, a methyl group shuttle required for the de novo synthesis of purines, thymidylic acid, and certain amino acids. Dihydrofolate reductase deficiency has been linked to megaloblastic anemia.

# **DHFR Antibody (Center) Blocking Peptide - References**

Gemmati, D., Am. J. Hematol. 84 (8), 526-529 (2009) Stockman, B.J., Biochemistry 31 (1), 218-229 (1992)