

# Mouse DHFR Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7378b

#### **Product Information**

**Application** IHC-P, WB, E **Primary Accession** P00375

**Reactivity** Human, Rat, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB19204Calculated MW21606Antigen Region135-164

#### **Additional Information**

**Gene ID** 13361

Other Names Dihydrofolate reductase, Dhfr

Target/Specificity This Mouse DHFR antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 135-164 amino acids from the

C-terminal region of mouse DHFR.

**Dilution** IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Mouse DHFR Antibody (C-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name Dhfr

**Function** Key enzyme in folate metabolism. Contributes to the de novo mitochondrial

thymidylate biosynthesis pathway (PubMed:<u>25980602</u>). Catalyzes an essential reaction for de novo glycine and purine synthesis, and for DNA precursor

synthesis (PubMed: 25980602). Binds its own mRNA.

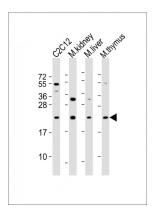
# **Background**

Dihydrofolate reductase converts dihydrofolate into tetrahydrofolate, a methyl group shuttle required for the de novo synthesis of purines, thymidylic acid, and certain amino acids. While the functional dihydrofolate reductase gene has been mapped to chromosome 5, multiple intronless processed pseudogenes or dihydrofolate reductase-like genes have been identified on separate chromosomes. Dihydrofolate reductase deficiency has been linked to megaloblastic anemia.

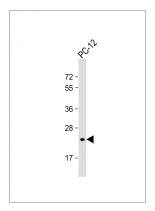
## References

Cody, V., Proteins 65 (4), 959-969 (2006) Stone, D., J. Biol. Chem. 254 (2), 480-488 (1979)

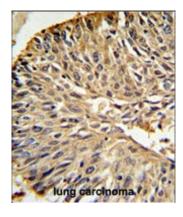
## **Images**



All lanes: Anti-DHFR Antibody (C-term) at 1:2000 dilution Lane 1: C2C12 whole cell lysate Lane 2: mouse kidney lysate Lane 3: mouse liver lysate Lane 4: mouse thymus lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Anti-DHFR Antibody (C-term) at 1:2000 dilution + PC-12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



DHFR Antibody (C-term) (Cat.# AP7378b) IHC analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the DHFR Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.