

**Anti-DHFR Picoband Antibody**  
**Catalog # ABO11868****Specification**

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**Anti-DHFR Picoband Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P00374</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Dihydrofolate reductase(DHFR) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-DHFR Picoband Antibody - Additional Information**

**Gene ID** 1719

**Other Names**

Dihydrofolate reductase, 1.5.1.3, DHFR

**Calculated MW**

21453 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Tissue Specificity**

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. .

**Protein Name**

Dihydrofolate reductase

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

E.coli-derived human DHFR recombinant protein (Position: V2-D187). Human DHFR shares 90% amino acid (aa) sequence identity with both mouse and rat DHFR.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the dihydrofolate reductase family.

**Anti-DHFR Picoband Antibody - 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}

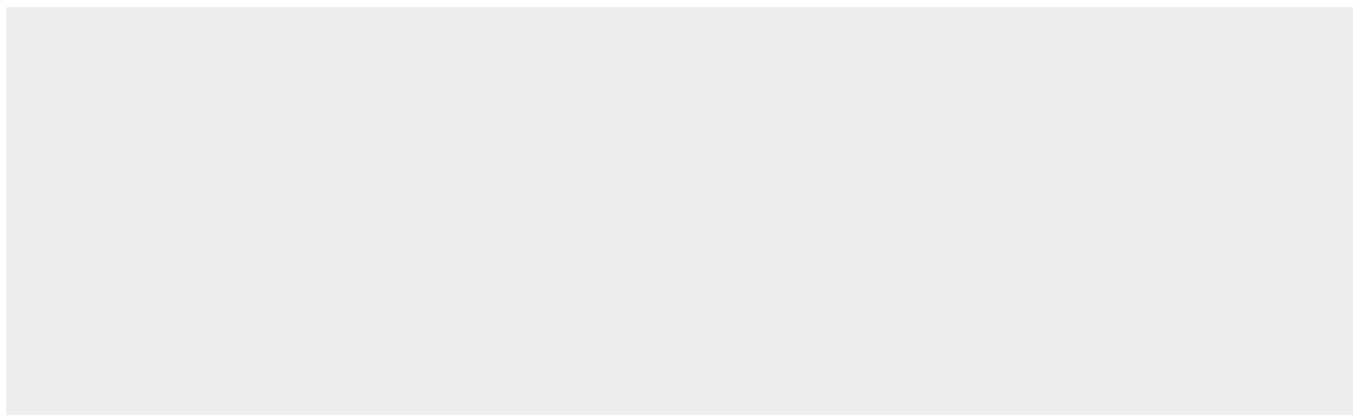
**Tissue Location**

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**Anti-DHFR Picoband Antibody - Protocols**

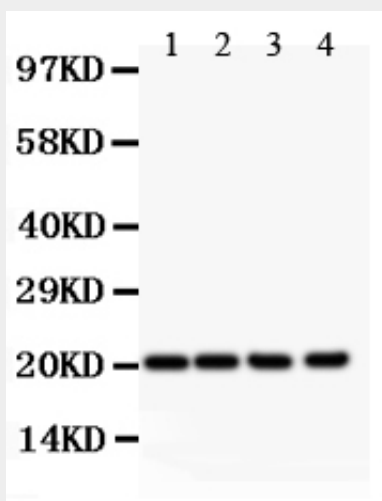
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

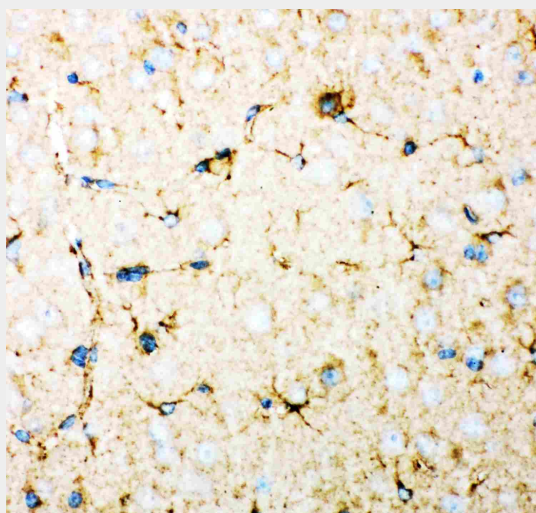
**Anti-DHFR Picoband Antibody - Images**



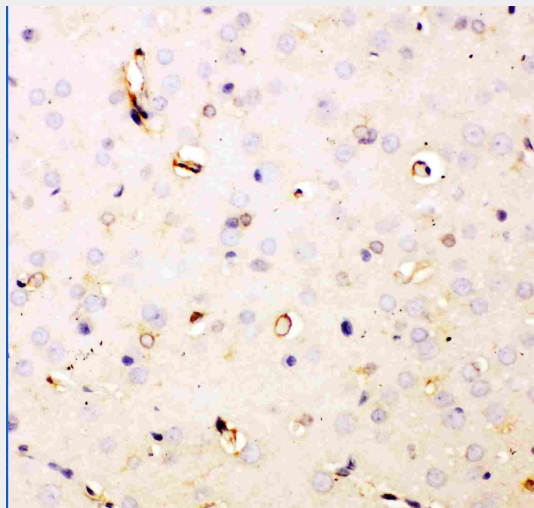
Anti- DHFR Picoband antibody, ABO11868, Western blotting All lanes: Anti DHFR (ABO11868) at 0.5ug/ml WB: Recombinant Human DHFR Protein 0.5ng Predicted bind size: 32KD Observed bind size: 32KD



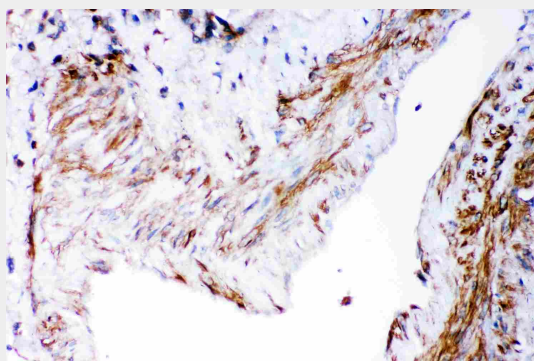
Anti- DHFR Picoband antibody, ABO11868, Western blotting All lanes: Anti DHFR (ABO11868) at 0.5ug/ml Lane 1: Rat Liver Tissue Lysate at 50ug Lane 2: Mouse Liver Tissue Lysate at 50ug Lane 3: HepG2 Whole Cell Lysate at 40ug Lane 4: Jurkat Whole Cell Lysate at 40ug Predicted bind size: 21KD Observed bind size: 21KD



Anti- DHFR Picoband antibody, ABO11868, IHC(P) IHC(P): Mouse Brain Tissue



Anti- DHFR Picoband antibody, ABO11868,IHC(P)IHC(P): Rat Brain Tissue



Anti- DHFR Picoband antibody, ABO11868,IHC(P)IHC(P): Human Lung Cancer Tissue

#### **Anti-DHFR Picoband Antibody - Background**

Dihydrofolate reductase, or DHFR, is an enzyme that reduces dihydrofolic acid to tetrahydrofolic acid, using NADPH as electron donor, which can be converted to the kinds of tetrahydrofolate cofactors used in 1-carbon transfer chemistry. In humans, the DHFR enzyme is encoded by the DHFR gene. It is found in the q11â€²q22 region of chromosome 5. What's more, DHFR belongs to the dihydrofolate reductase family, and it converts dihydrofolate into tetrahydrofolate, a methyl group shuttle required for the de novo synthesis of purines, thymidylic acid, and certain amino acids. DHFR is the key enzyme in folate metabolism. In addition, DHFR catalyzes an essential reaction for de novo glycine and purine synthesis, and for DNA precursor synthesis.