10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-DHFR Picoband Antibody

Catalog # ABO11868

Specification

Anti-DHFR Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P00374
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
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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 Na2HPO4, 0.05mg NaN3.

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 r˚Constitution, 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
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

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 Cytomety
- Cell Culture

Anti-DHFR Picoband Antibody - Images

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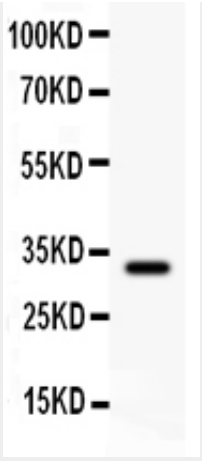
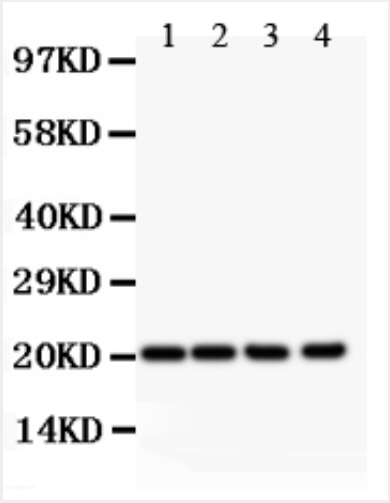
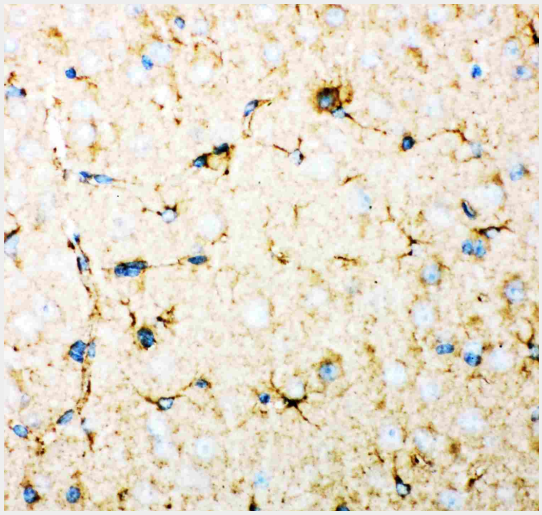


Anti- DHFR Picoband antibody, ABO11868, Western blottingAll lanes: Anti DHFR (ABO11868) at 0.5ug/mlWB: Recombinant Human DHFR Protein 0.5ngPredicted bind size: 32KDObserved bind size: 32KD



Anti- DHFR Picoband antibody, ABO11868, Western blottingAll lanes: Anti DHFR (ABO11868) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Mouse Liver Tissue Lysate at 50ugLane 3: HepG2 Whole Cell Lysate at 40ugLane 4: Jurkat Whole Cell Lysate at 40ugPredicted bind size: 21KDObserved bind size: 21KD



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

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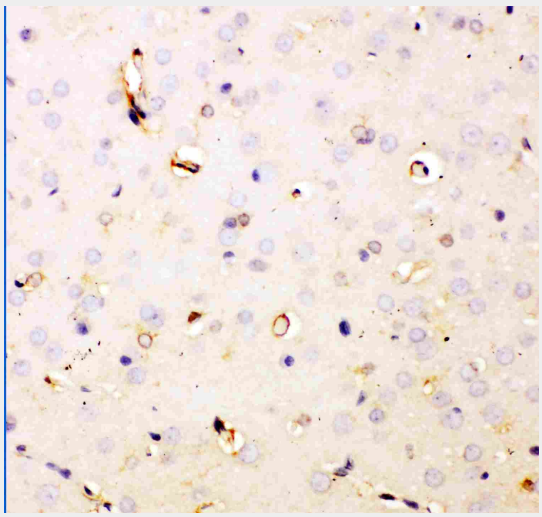
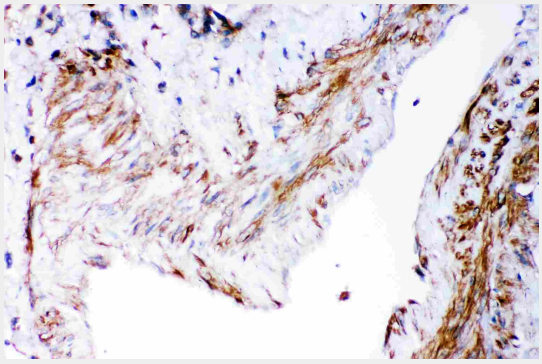


Anti- DHFR Picoband antibody, ABO11868,IHC(P)IHC(P): Rat Brain Tissue



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†'q22 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.