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Anti-Cardiac FABP Fabp3 Antibody Picoband™ (monoclonal, 6C4)

Catalog # ABO14334

Specification

Anti-Cardiac FABP Fabp3 Antibody Picoband™ (monoclonal, 6C4) - Product Information

Application	**WB, IHC, E**
Primary Accession	P07483
Host	**Mouse**
Isotype	**Mouse IgG1**
Reactivity	**Rat, Mouse**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti-Cardiac FABP Fabp3 Antibody Picoband™ (monoclonal, 6C4) . Tested in ELISA, IHC, WB applications. This antibody reacts with Mouse, Rat.

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

Anti-Cardiac FABP Fabp3 Antibody Picoband™ (monoclonal, 6C4) - Additional Information

Gene ID 79131

Other Names
Fatty acid-binding protein, heart, Fatty acid-binding protein 3, Heart-type fatty acid-binding protein, H-FABP, Fabp3

Calculated MW
15 kDa KDa

Application Details
Western blot, 0.1-0.5 µg/ml
 Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/ml
 ELISA (Cap), 1-5 µg/ml

Subcellular Localization
Cytoplasm.

Tissue Specificity
Heart, but also skeletal muscle, kidney, brain and mammary gland.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived rat Cardiac FABP recombinant protein (Position: A2-A133).

Cross Reactivity
No cross-reactivity with other proteins.

Storage	**Store at -20˚C for one year from date of receipt. After reconstitution, at 4˚C for one month. It can also be aliquotted and stored frozen at -20˚C for six months. Avoid repeated freeze-thaw cycles.**

Anti-Cardiac FABP Fabp3 Antibody Picoband™ (monoclonal, 6C4) - Protein Information

Name Fabp3

Function
FABPs are thought to play a role in the intracellular transport of long-chain fatty acids and their acyl-CoA esters.

Cellular Location
Cytoplasm.

Tissue Location
Heart, but also skeletal muscle, kidney, brain and mammary gland

Anti-Cardiac FABP Fabp3 Antibody Picoband™ (monoclonal, 6C4) - 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-Cardiac FABP Fabp3 Antibody Picoband™ (monoclonal, 6C4) - Images

Figure 1. Western blot analysis of Cardiac FABP using anti-Cardiac FABP antibody (M01734).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: mouse heart tissue lysates,
Lane 2: mouse heart tissue lysates,
Lane 3: rat heart tissue lysates,
Lane 4: rat heart tissue lysates.
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Cardiac FABP antigen affinity purified monoclonal antibody (Catalog # M01734) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system.

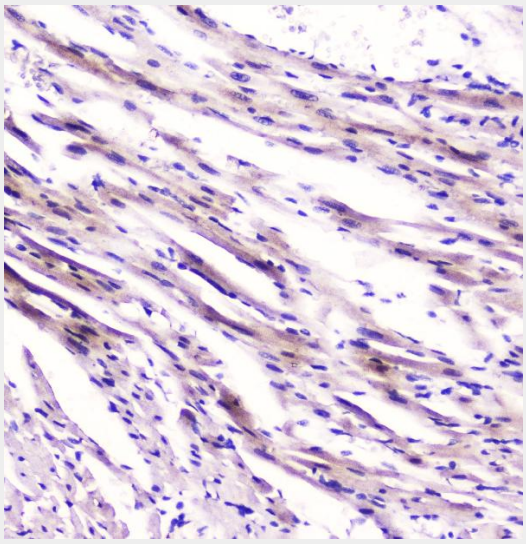

Figure 2. IHC analysis of Cardiac FABP using anti-Cardiac FABP antibody (M01734).
Cardiac FABP was detected in paraffin-embedded section of rat cardiac muscle tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml rabbit anti-Cardiac FABP Antibody (M01734) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

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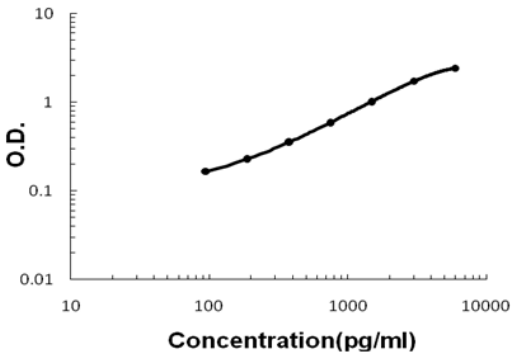

Figure 3. Sandwich ELISA - Recombinant rat Cardiac FABP protein standard curve.
Use in combination with reagents from Rat Cardiac FABP ELISA Kit EZ-Set (DIY Antibody Pairs) (EZ1623).

Anti-Cardiac FABP Fabp3 Antibody Picoband™ (monoclonal, 6C4) - Background

Heart-type fatty acid binding protein (hFABP), also known as mammary-derived growth inhibitor, is a protein that in humans is encoded by the FABP3 gene. The intracellular fatty acid-binding proteins (FABPs) belong to a multigene family. Fatty acid-binding protein 3 gene contains four exons and its function is to arrest growth of mammary epithelial cells. This gene is also a candidate tumor suppressor gene for human breast cancer. Cardiac-type fatty acid-binding protein (cFABP) from human heart muscle of three individuals was isolated and characterized as pI 5.3-cFABP.