

## Polyclonal Anti- Cardiac FABP Picoband™ Antibody

Catalog Number: PB9759

### Description

<b>Gene Name</b>	fatty acid binding protein 3, muscle and heart (mammary-derived growth inhibitor)
<b>Recommended Protein Name</b>	Fatty acid-binding protein, heart
<b>Lot No.</b>	0971512Da0959116
<b>Size</b>	100µg/vial
<b>Form</b>	lyophilized
<b>Ig type</b>	Rabbit IgG
<b>Specificity</b>	No cross reactivity with other proteins.
<b>Purification</b>	Immunogen affinity purified.
<b>Species</b>	<b>Reacts with:</b> mouse, rat <b>Predicted to work with:</b> human
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the N-terminus of human Cardiac FABP (15-48aa KNFDDYMKSLGVGFATRQVASMTKPTTIIKNGD), identical to the related mouse and rat sequences.
<b>Contents</b>	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .

### Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Rat	Hu	-
Immunohistochemistry (Paraffin-embedded Section)	0.5-1µg/ml	Ms, Rat	Hu	By Heat

**Tested Species:** In-house tested species with positive results.

**Predicted Species:** Species predicted to be fit for the product based on sequence similarities.

**By Heat:** Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections.

*Other applications have not been tested.*

*Optimal dilutions should be determined by end users.*

## Preparation and storage

**Reconstitution:** 0.2ml of distilled water will yield a concentration of 500µg/ml.

**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.

## Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IHC(P).

## 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 pl 5.3-cFABP.

## Reference

1. "Entrez Gene: FABP3 fatty acid binding protein 3, muscle and heart (mammary-derived growthinhibitor)".
2. Borchers, T., Hojrup, P., Nielsen, S. U., Roepstorff, P., Spener, F., Knudsen, J. Revision of the amino acid sequence of human heart fatty acid binding protein. *Molec. Cell. Biochem.* 98: 127-133, 1990.
3. Phelan CM, Larsson C, Baird S, Futreal PA, Ruttledge MH, Morgan K, Tonin P, Hung H, Korneluk RG, Pollak MN, Narod SA (Dec 1996). "The human mammary-derived growth inhibitor (MDGI) gene: genomic structure and mutation analysis in human breast tumors". *Genomics* 34 (1): 63–8.