

**MONOCLONAL ANTIBODY TO
HUMAN HEART FATTY ACID BINDING PROTEIN
(H-FABP, FABP3)
clone 66E2**



Catalog no HM2016 (lot number and expiry date are indicated on the label)

Description The monoclonal antibody 66E2 recognizes human heart fatty acid binding protein (H-FABP) of both natural and recombinant origin. The H-FABP protein is derived from the human FABP3 gene. FABPs are small intracellular proteins (~13-14 kDa) with a high degree of tissue specificity that bind long chain fatty acids. They are abundantly present in various cell types and play an important role in the intracellular utilization of fatty acids, transport and metabolism. There are at least nine distinct types of FABP, each showing a specific pattern of tissue expression. Due to its small size, FABP leaks rapidly out of ischemically damaged necrotic cells leading to a rise in serum levels. Ischemically damaged tissues are characterized histologically by absence (or low presence) of FABP facilitating recognition of such areas. H-FABP is localized in the heart, skeletal and smooth muscle, mammary epithelial cells, aorta, distal tubules of the kidney, lung, brain, placenta, and ovary. The monoclonal antibody 66E2 stains heart muscle cells and striated skeletal muscle cells in immunohistology. It can be used to detect ischemia areas of human heart. It is also useful as marker for brain damage. Furthermore, this antibody is useful for the purification of H-FABP.

Aliases FABP3, Muscle fatty acid-binding protein, Mammary-derived growth inhibitor

Species Mouse IgG₁

Cross reactivity	Cross reactant	Reactivity
	Rat H-FABP	Yes
	Mouse H-FABP	Yes
	Swine H-FABP	Yes
	Human B-FABP	Average

Formulation 1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.1% bovine serum albumin and 0.02% sodium azide.

Application

	F	FC	FS	IA	IF	IP	P	W
Yes	•			•		•		•
No								
N.D.		•	•		•		•	

N.D.= Not Determined; F = Frozen sections; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IF = Immuno Fluorescence; IP = Immuno Precipitation; P = Paraffin sections; W = Western blot

Use For immunohistology and Western blotting, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

Storage and stability Product should be stored at 4°C. Under recommended storage conditions, product is stable for one year.

Precautions For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result with the use or derivation of this product.

- References**
1. Roos, W et al; Monoclonal antibodies to human heart fatty acid-binding protein. *J Immunol Meth* 1995, 183: 149
 2. Guillame, E et al; A potential cerebrospinal fluid and plasmatic marker for the diagnosis of Creutzfeld-Jakob disease. *Proteomics* 2003, 3: 1495
 3. Zimmermann-Ivol et al; Fatty acid binding protein as a serum marker for the early diagnosis of stroke. *Mol Cell Proteomics* 2004, 3: 66
 4. Pelsers, M et al; Brain- and heart-type fatty acid-binding proteins in the brain: tissue distribution and clinical utility. *Clin Chem* 2004, 50: 1568

Also available

HM2017	Biotinylated monoclonal antibody against Human H-FABP, clone 66E2
HM2018	Monoclonal antibody against Human H-FABP, clone 67D3
HM2019	Biotinylated monoclonal antibody against Human H-FABP, clone 67D3

