

## CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

**Product name** H-FABP, Human, clone 66E2

Catalog number HM2016-500UG

Lot number - Expiry date -

Volume - Amount 500 μg

Formulation 0.2 µm filtered in PBS Concentration >0.5 mg/ml

Host Species Mouse IgG1 Conjugate None

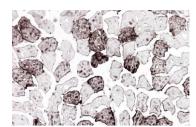
Endotoxin N.A. Purification Protein G

Storage 4°C

## **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #						1-4	5	3,4,6
Yes	•					•	•	•
No								
N.D.								

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



IHC-F: Immunohistochemical staining of H-FABP in human skeletal muscle tissue.

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.

- IP: Biotinylated 66E2 was immobilized on streptavidin beads and added to serum to immunoprecipitate H-FABP (Ref.5).
- W: Reduced sample treatment. The band size is ~15 kDa (Ref.4). 1μg/ml was used (Ref.6).
- F: Permeabilization was done in cold acetone with 0.5% hydrogen peroxidase for 10 min, after drying and washing, antibodies were incubated for 30 minutes.
- Positive control: Heart cells or recombinant H-FABP; Negative control: Tonsil tissue.

# General Information

## Description

The monoclonal antibody 66E2 recognizes human heart-type 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. It is also useful as marker for brain damage. Furthermore, this antibody is useful for the purification of H-FABP.

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Immunogen Purified human H-FABP.

Aliases Heart-type fatty acid-binding protein, Fatty acid-binding protein 3, FABP3, Muscle fatty acid-binding protein, Mammary-

derived growth inhibitor.

Gene name: FABP3, FABP11, MDGI

#### **Cross reactivity**

Rat H-FABP: Yes: Mouse H-FABP: Yes: Swine H-FABP: Yes: Human B-FABP: Average (in ELISA): Human A-FABP: No; Human I-FABP: No; Human L-FABP: No.

#### References

- Roos, W et al; Monoclonal antibodies to human heart fatty acid-binding protein. J Immunol Meth 1995, 183: 149
- Guillaume, E et al; A potential cerebrospinal fluid and plasmatic marker for the diagnosis of Creutzfeldt-Jakob 2. disease. Proteomics 2003, 3: 1495
- 3. Zimmermann-Ivol, C 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
- 5. Zhen, E et al; Quantification of heart fatty acid binding protein as a biomarker for drug-induced cardiac and musculoskeletal necroses. Proteomics Clin Appl 2007, 1: 661
- 6 Tolle, A et al; Fatty acid binding proteins (FABPs) in prostate, bladder and kidney cancer cell lines and the use of IL-FABP as survival predictor in patients with renal cell carcinoma. BMC Cancer 2011, 11:302

### Storage&stability

Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least 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 from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC Brenda Teunissen

Date 05/11/2019

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.

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