

Human HFABP, FABP3 ELISA Kit | HFABP elisa kit

Human HFABP, FABP3

 CATALOG #
AAA59124

 REACTIVITY
Human

PRODUCT SYNONYMS

HFABP; FABP3; Human HFABP; HFABP elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Assay Type	Sandwich
Samples	Serum, cell culture supernatants or tissue homogenate
Detection Range	15.6 pg/ml - 1000 pg/ml
Sensitivity	1 pg/ml
Preparation and Storage	Store at 4 degree C for 6 months, or at -20 degree C for one year. Store HRP conjugated antibody at 4 degree C for one year.

IMAGES

Typical Data & Standard Curve
Results of a typical standard run of a human HFABP ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (N/A-not applicable)

X	pg/ml	0	15.6	31.2	62.5	125	250	500	1000
Y	OD450	0.085	0.112	0.129	0.187	0.361	0.760	1.903	3.488

Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for HFABP elisa kit

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 serum HFABP level is an effective biomarker for detecting AKI in non-surgical intensive care patients. HFABP expression is significantly higher in in-stent restenosis, ISR tissue than in non-ISR tissue from diabetic and nondiabetic minipigs. Overexpression of HFABP induces multiple pathway-related promotion of inflammation, growth and migration in vascular SMCs, suggesting a potential role in coronary artery ISR. hFABP is a rapid marker of perioperative myocardial damage and peaks earlier than CKMB or TnI. The kinetics of marker proteins in serial samples immediately after reperfusion is more suitable for the detection of perioperative myocardial infarction than a fixed cut-off level.

Principle of the Assay: This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-HFABP monoclonal antibody was pre-coated onto 96-well plates. The standards and test samples were added to the wells and any HFABP present is bound by the immobilized antibody. After washing away any unbound substances, the HRP conjugated anti-HFABP monoclonal antibody was added to wells as detection antibodies. Following a wash to remove any unbound antibody-enzyme reagent, the TMB substrates were added to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding stop solution. The density of yellow is proportional to the HFABP amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of HFABP can be calculated.

References

Shirakabe A, Kobayashi N, Hata N, Shinada T, Tomita K, Tsurumi M, Okazaki H, Matsushita M, Yamamoto Y, Yokoyama S, Asai K, Shimizu W. The serum heart-type fatty acid-binding protein (HFABP) levels can be used to detect the presence of acute kidney injury on admission in patients admitted to the non-surgical intensive care unit. *BMC Cardiovasc Disord.* 2016 Sep 5;16(1):174. Chen K, Chen QJ, Wang LJ, Liu ZH, Zhang Q, Yang K, Wang HB, Yan XX, Zhu ZB, Du R, Zhang RY, Shen WF, Lu L. Increment of HFABP Level in Coronary Artery In-Stent Restenosis Segments in Diabetic and Nondiabetic Minipigs: HFABP Overexpression Promotes Multiple Pathway-Related Inflammation, Growth and Migration in Human Vascular Smooth Muscle Cells. *J Vasc Res.* 2016;53(1-2):27-38. Epub 2016 Jul 2. Petzold T, Feindt P, Sunderdiek U, Boeken U, Fischer Y, Gams E. Heart-type fatty acid binding protein (hFABP) in the diagnosis of myocardial damage in coronary artery bypass grafting. *Eur J Cardiothorac Surg.* 2001 Jun;19(6):859-64.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/human-elisa-kits/hfabp-fabp3/59124>