# Monoclonal Antibody against Human FABP4 (2C10)

Catalog Number: 21030 Size: 100 µg Host: Mouse

### **Introduction to the Molecule**

Fatty-acid binding protein 4 (FABP4), also termed adipocyte fatty-acid binding protein (A-FABP), or aP2, is a novel adipocyte-expressed factor which accounted for  $\sim\!6\%$  of total cellular proteins. Several animal experiments suggested that FABP4 plays a key role in the link between obesity and various features of metabolic syndrome<sup>1</sup>. Mice with targeted disruption of FABP4 accompany FABP5 almost completely to protect against diet-induced obesity, insulin resistance, dyslipidemia, type 2 diabetes, and fatty liver disease<sup>2</sup>. Studies in human found FABP4 serum levels were significantly increased in overweight and obese subjects, which predicted the risk to develop a metabolic syndrome and type 2 diabetes<sup>3-4</sup>. Additionally, serum FABP4 levels were associated with nonalcoholic fatty liver disease, carotid atherosclerosis and coronary artery disease<sup>5-7</sup>.

### **Purification**

Protein G affinity purification

## **Immunogen**

Recombinant full-length human FABP4 in E.coli.

## **Specificity**

The antibody detects human FABP4. Not yet tested in other species.

## Formulation & Storage

Liquid in phosphate-buffered saline (PBS). Store at -20°C for less than one week. For long-term storage, aliquot and freeze at -70°C. Avoid repeated freeze/defrost cycles.

# Application/Usage

This antibody can be used as a capture antibody in a human FABP4 ELISA.

### References

- [1] Makowski L, et al. (2004) J Nutr. 134: 2464S-2468S.
- [2] Makowski L, et al. (2001) Nat Med. 7: 699-705.
- [3] Xu A, et al. (2006). Clin Chem. 52(3):405-13.
- [4] Xu A, et al. (2007). Circulation. 115:1537–1543.
- [5] Rhee EJ, et al. (2009) Eur J Endocrinol. 160(2):165-72.
- [6] Tso AW, et al. (2007) Diabetes Care. 30(10):2667-72
- [7] J. Hyun Koh, et al. (2009) Diabetes Care. 32(1): 147 152.