

Polyclonal Antibody against Mouse FGF - 21

Catalog Number: 12180

Size: 100 µg

Host: Rabbit

Immunogen:

Recombinant full-length mouse FGF-21 expressed in E.Coli.

Preparation:

Rabbit specific IgG was purified by mouse FGF-21 affinity chromatography

Specificity:

The antibody detects circular mouse FGF-21.

Formulation:

Solution in PBS

Storage:

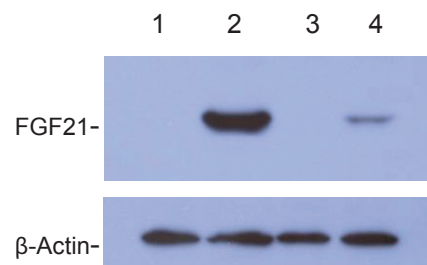
Store at -20°C. For long-term storage, aliquot and freeze at -70°C. Avoid repeated freeze/defrost cycles.

Application/Usage:

ELISA - This antibody can be used at 2 µg/mL with the appropriate secondary reagents to detect mouse FGF-21.

Western blot - This antibody can be used at 0.2µg/mL~0.5µg/mL with the appropriate secondary reagents to detect mouse FGF-21.

Immunoprecipitation and immunocytochemistry are not tested.



Western blot analysis of FGF21 in 10ug non FGF21 expressing cell lysate (Lane 1,3) and FGF21 expressing cell lysate (Lane 2,4) using anti-FGF21 followed by goat anti-rabbit antibody. (The figure is from Prof. Cheah's lab, HKU.)

Introduction

Fibroblast growth factor 21(FGF-21) is a novel protein that has been implicated in the regulation of lipid and glucose metabolism under fasting and ketotic conditions^{1,2}. In murine models, FGF-21 is predominantly expressed in liver, but it also expressed in adipose tissue and pancreatic β -cells^{3,4}. FGF-21 stimulates glucose uptake in adipocytes. It also protects animals from diet-induced obesity when overexpressed in transgenic mice and lowers blood glucose and triglyceride levels when administered to diabetic rodents⁵. When administered daily for 6 weeks to diabetic rhesus monkeys, FGF-21 caused a dramatic decline in fasting plasma glucose, fructosamine, triglycerides, insulin, and glucagon⁶. Furthermore, elevated plasma FGF-21 concentrations in humans appear to be related to the presence of hepatic and peripheral insulin resistance⁷.

Reference:

- [1] Kharitonov A, Shiyanova TL, et al. (2005) *J Clin Invest*; 115: 1627– 1635
- [2] Badman MK, Pissios P, et al. (2007) *Cell Metab*; 5: 426– 437
- [3] Nishimura T, Nakatake Y, et al. (2000) *Biochim Biophys Acta*; 1492: 203– 206
- [4] Kurosu H, Choi M, et al. (2007) *J Biol Chem*; 282: 26687– 26695
- [5] Kharitonov A, Shiyanova TL, et al. (2005) *J. Clin. Invest.* 115: 1627–35.
- [6] Kharitonov A, Wroblewski VJ, et al. (2007) *Endocrinology*;148:774-81
- [7] Chavez AO, Molina-Carrion M, et al. (2009) *Diabetes Care*; 32:1542-6.