

## 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, azide free.

**Storage:**

Store at -20°C.

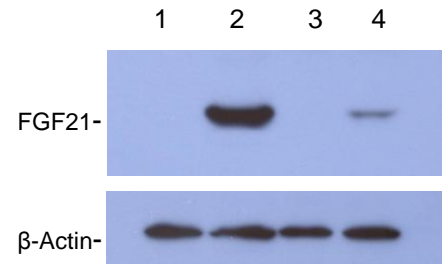
For long-term storage, aliquot and freeze at -70°C.

Avoid repeated freeze/defrost cycles.

**Applications:**

**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 0.2 µg/ml to 0.5 µg/ml with the appropriate secondary reagents to detect mouse FGF-21.



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<sup>1,2</sup>. In murine models, FGF-21 is predominantly expressed in liver, but it also expressed in adipose tissue and pancreatic β-cells<sup>3,4</sup>. 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 rodents<sup>5</sup>. When administered daily for 6 weeks to diabetic rhesus monkeys, FGF-21 caused a dramatic decline in fasting plasma glucose, fructosamine, triglycerides, insulin,



## Antibody and Immunoassay Services

Li Ka Shing Faculty of Medicine, The University of Hong Kong

---

and glucagon<sup>6</sup>. Furthermore, elevated plasma FGF-21 concentrations in humans appear to be related to the presence of hepatic and peripheral insulin resistance<sup>7</sup>.

### **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.