

Polyclonal Antibody against Human FGF - 21

**Catalog Number: 11180**

Size: 100 µg

**Host: Rabbit**

**Immunogen:**

Recombinant full-length human FGF-21 expressed in *E.Coli*.

**Purification method:**

Immunoaffinity chromatography on a column with immobilized recombinant human FGF-21.

**Specificity:**

The antibody detects human FGF-21.

**Formulation:**

Solution in PBS.

**Storage:**

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

**Application/Usage:**

**ELISA-** When conjugating to biotin, the antibody can be used as detection antibody.

**Western blot, Immunoprecipitation and immunocytochemistry** are not tested.

**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  $\beta$ -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, 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] Kharitononkov 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] Kharitononkov A, Shiyanova TL, et al. (2005) *J. Clin. Invest.* 115: 1627–35.
- [6] Kharitononkov A, Wroblewski VJ, et al. (2007) *Endocrinology*;148:774-81
- [7] Chavez AO, Molina-Carrion M, et al. (2009) *Diabetes Care*; 32:1542-6.