



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^{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.