Human FGF-21, C-His Tag Protein

HA210921

Product name:	Human FGF-21, C-His Tag
Species reactivity:	Human
Bio-Activity:	Testing in progress.
Protein construction description:	A DNA sequence encoding the human FGF-21 protein (Q9NSA1) (His 29-Ser 209) was expressed with a His tag at the C-terminus

Background: Fibroblast growth factor 21 is a protein that in mammals is encoded by the FGF21 gene. The protein encoded by this gene is a member of the fibroblast growth factor (FGF) family and specifically a member of the endocrine subfamily which includes FGF23 and FGF15/19. FGF21 is the primary endogenous agonist of the FGF21 receptor, which is composed of the co-receptors FGF receptor 1 and β-Klotho. FGF family members possess broad mitogenic and cell survival activities and are involved in a variety of biological processes including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGFs act through a family of four FGF receptors. Binding is complicated and requires both interaction of the FGF molecule with an FGF receptor and binding to heparin through a heparin binding domain. Endocrine FGFs lack a heparin binding domain and thus can be released into the circulation. FGF21 is a hepatokine – i.e., a hormone secreted by the liver – that regulates simple sugar intake and preferences for sweet foods via signaling through FGF21 receptors in the paraventricular nucleus of the hypothalamus and correlates with reduced dopamine neurotransmission within the nucleus accumbens. A single-nucleotide polymorphism of the FGF21 gene – the FGF21 rs838133 variant (frequency 44.7%) – has been identified as a genetic mechanism responsible for the sweet tooth behavioral phenotype, a trait associated with cravings for sweets and high sugar consumption, in both humans and mice.

Purity:	>95% as determined by SDS-PAGE.
Endotoxin:	Less than 1.0 EU per μg by the LAL method.
Fragment region:	FGF-21 (29-209)
Source:	HEK293
Accession:	Q9NSA1
Predicted molecular mass:	20.8 kD
Formulation:	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution:	Reconstitute at 250 μg/ml in sterile water.
Storage:	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20℃ to -80℃ It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.

Images

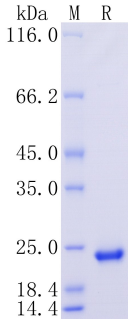

Fig1: Protein on SDS-PAGE under reducing (R) condition.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".