## Human Leptin, Tag Free Protein HA210961



Product name: Human Leptin, Tag Free

Species reactivity: Human

**Bio-Activity:** Testing in progress.

**Protein construction** 

A DNA sequence encoding the human Leptin protein (P41159) (Val 22-Cys 167) was expressed with tag free.

**Background:** Key player in the regulation of energy balance and body weight control. Once released into the circulation, has

central and peripheral effects by binding LEPR, found in many tissues, which results in the activation of several major signaling pathways. In the hypothalamus, acts as an appetite-regulating factor that induces a decrease in food intake and an increase in energy consumption by inducing anorexinogenic factors and suppressing orexigenic neuropeptides, also regulates bone mass and secretion of hypothalamo-pituitary-adrenal hormones. In the periphery, increases basal metabolism, influences reproductive function, regulates pancreatic beta-cell function and insulin secretion, is pro-angiogenic for endothelial cell and affects innate and adaptive immunity. In the arcuate nucleus of the hypothalamus, activates by depolarization POMC neurons inducing FOS and SOCS3 expression to release anorexigenic peptides and inhibits by hyperpolarization NPY neurons inducing SOCS3 with a consequent reduction on release of orexigenic peptides. In addition to its known satiety inducing effect, has a modulatory role in nutrient absorption. In the intestine, reduces glucose absorption by enterocytes by activating PKC and leading to a sequential activation of p38, PI3K and ERK signaling pathways which exerts an

inhibitory effect on glucose absorption.

**Purity:** >95% as determined by SDS-PAGE.

**Endotoxin:** Less than 1.0 EU per µg by the LAL method.

Fragment region: Leptin (22-167)

Source: HEK293

Accession: P41159

Predicted molecular mass: 16.4 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 -

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880 Technical:0086-571-89986345

Service mail:support@huabio.cn



## **Images**

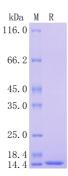


Fig1: Protein on SDS-PAGE under reducing (R) condition.

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