

32-2092: TSHB Recombinant Protein

Alternative Name : Thyroid Stimulating Hormone Beta,Thyrotropin Beta Chain,TSH-B,Thyrotropin Subunit Beta,Thyroid-Stimulating Hormone Subunit Beta,TSH-beta,Thyrotropin Alfa,CHNG4.

Description

Source : Escherichia Coli. TSHB Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 141 amino acids (21-138 a.a) and having a molecular mass of 15.9kDa.TSHB is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques. Thyroid-stimulating hormone (also known as TSH or thyrotropin) is a hormone synthesized and secreted by thyrotrope cells in the anterior pituitary gland which regulates the endocrine function of the thyroid gland. TSH stimulates the thyroid gland to secrete the hormones thyroxine (T4) and triiodothyronine (T3). TSH production is controlled by a Thyrotropin Releasing Hormone, (TRH), which is manufactured in the hypothalamus and transported to the Anterior Pituitary gland, where it increases TSH production and release. Somatostatin is also produced by the hypothalamus, and has an opposite effect on the pituitary production of TSH, decreasing or inhibiting its release. The level of Thyroid hormones (T3 and T4) in the blood have an additional effect on the pituitary release of TSH, When the levels of T3 and T4 are low, the production of TSH is increased, and conversely, when levels of T3 and T4 are high, then TSH production is decreased. This effect creates a regulatory negative feedback loop. TSH is a glycoprotein and consists of two subunits, the alpha and the beta subunit. The a (alpha) subunit is identical to that of human chorionic gonadotropin (HCG), luteinising hormone (LH), follicle-stimulating hormone (FSH). The b (beta) subunit is unique to TSH, and therefore determines its function. Alterations in this gene are the cause for congenital hypothyroidism.

Product Info

Amount : 10 µg
Purification : "Greater than 85.0% as determined by SDS-PAGE."
Content : TSHB protein solution (0.25mg/ml) containing 20mM Tris-HCl buffer (pH8.0), 0.4M Urea and 10% glycerol.
Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time.For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please avoid freeze thaw cycles.
Amino Acid : MGSSHHHHHH SSGLVPRGSH MGSFCIPTEY TMHIERRECA YCLTINTTIC AGYCMTRDIN GKLFLPKYAL SQDVCTYRDF IYRTVEIPGC PLHVAPYFSY PVALSCKCGK CNTDYSDCIH EAIKTNCTK PQKSYLVGFS V.

