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## Recombinant Human THR $\beta$ Protein, N-His

Catalog Number: bs-105744P

Species: Human

AA Seq: 239-457/461

Predicted MW: 27.07 kDa

Tags: N-His

Purity: >90% as determined by SDS-PAGE.

Purification: AC

Form: Lyophilized

Storage: Lyophilized from a solution in PBS pH 7.4, 0.02% NLS, 1mM EDTA, 4% Trehalose, 1% Mannitol.

Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8°C for frequent use. Store at -20 to -80°C for twelve months from the date of receipt.

**Background:** Thyroid hormone receptors (TRs) are ligand-dependent transcription factors that mediate the biological activities of thyroid hormone (T<sub>3</sub>). Thyroid hormone receptor  $\beta$ 2 (TR $\beta$ 2) is a high affinity receptor for triiodothyronine which belongs to the nuclear hormone receptor family and the NR1 subfamily. It is composed of three domains: a modulating N-terminal domain, a DNA-binding domain and a C-terminal steroid-binding domain. Defects in the receptor result in generalized thyroid hormone resistance (GTHR). GTHR is transmitted as an autosomal dominant trait, but an autosomal recessive form also exists. The disease is characterized by goiter, abnormal mental functions, increased susceptibility to infections, abnormal growth and bone maturation, tachycardia and deafness. GTHR patients also have high levels of circulating thyroid hormones (T<sub>3</sub>-T<sub>4</sub>), with normal or slightly elevated thyroid stimulating hormone.