

## TRH

### Synthetic Human Thyrotropin Releasing Hormone

<b>Catalog No.</b>	CRP602A	<b>Quantity:</b>	100 mg
	CRP602B		250 mg
	CRP602C		500 mg

**Alternate Names:** Prothyroliberin, Protirelin

**Description:** Thyrotropin-releasing hormone (TRH), also called thyrotropin-releasing factor (TRF), thyroliberin or protirelin, is a tripeptide hormone that stimulates the release of thyroid-stimulating hormone and prolactin by the anterior pituitary. TRH is produced by the hypothalamus, near the paraventricular nucleus. It travels across the median eminence to the pituitary via the hypophyseal portal system. It is released from cells called thyrotropes.

In addition to the brain, TRH can also be detected in other areas of the body including the gastrointestinal system and pancreatic islets. Protirelin stimulates the secretion of pituitary thyroid stimulating hormone from the anterior pituitary and has been shown that protirelin increases secretion of prolactin. Protirelin is identified as 5-oxo-L-prolyl-L-histidyl-L-proline amide. It is a synthetic tripeptide that is believed to be structurally identical to the naturally-occurring thyrotropin-releasing hormone produced by the hypothalamus.

Thyrotropin Releasing Hormone Human  $C_{16}H_{22}N_6O_4$  has a molecular mass of 362.39 Dalton.

**Gene ID:** 7200

**Source:** Synthetic

**Molecular Weight:** 362.39 D

**Formulation:** Sterile Filtered White lyophilized (freeze-dried) powder. Lyophilized from a concentrated (1 mg/ml) solution in water containing no additives.

**Purity:** >99.0% as determined by RP-HPLC and SDS-PAGE.

**Amino Acid Sequence:** Pyr-His-Pro-NH<sub>2</sub>.

**Reconstitution:** It is recommended to reconstitute the lyophilized TRH in sterile, distilled H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**Storage & Stability:** Lyophilized protein, although stable at room temperature for 3 weeks, should be stored desiccated at -20°C to -80°C. Upon reconstitution, the protein may be stored at 2-4°C for up to 7 days and for future use it should be aliquoted and frozen at -20°C to -80°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please note that the addition of any carrier protein into this product may produce unwanted endotoxin. This depends upon the particular application employed. **Avoid repeated freeze-thaw cycles.**

**Certification:** This material is synthetic in nature and contains no animal products.

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**