

## 32-5082: Human Thyroglobulin

**Alternative Name :** Thyroglobulin,TGN,AITD3,TG.

### Description

Source : Native, Isolated from human thyroid glands. Human Thyroglobulin is a glycosylated, polypeptide chain having a total molecular mass of 662 kDa (331 kDa per subunit). Thyroglobulin (TG) represents one of the main autoantigenic targets in autoimmune thyroid disease of humans. TG is a large globular dimeric glycoprotein with a total molecular weight of 660 kDa, which occupies a key precursor role in the biosynthesis of the thyroid hormones. Approximately 75% of the total protein content of the thyroid follicle consists of TG. The thyroid gland uses the Thyroglobulin in order to produce the thyroid hormones thyroxine (T4) and triiodothyronine (T3). Thyroglobulin is produced by the thyroid epithelial cells (thyrocytes) which form spherical follicles. Thyroglobulin is subsequently secreted and stored in the follicular lumen. Patients with Hashimoto's thyroiditis or Graves' disease, frequently develop antibodies against Thyroglobulin. Tg-specific antibodies help in the diagnosis of the above diseases, however they also may be present in apparently healthy euthyroid individuals. Blood Thyroglobulin levels can be used as a tumor marker for certain kinds of thyroid cancer, and they may also be elevated in cases of Graves' disease.

### Product Info

<b>Amount :</b>	100 µg
<b>Purification :</b>	Greater than 95% as determined by SDS-PAGE.
<b>Content :</b>	Human Thyroglobulin is supplied in 20mM HEPES buffer pH-7.6, 150mM NaCl and 40% Sucrose (w/v).
<b>Storage condition :</b>	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Avoid multiple freeze-thaw cycles.