Datasheet for ABIN577073

NN-TSH ELISA Kit

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Overview

Quantity:	96 tests
Target:	NN-TSH
Reactivity:	Human
Method Type:	Sandwich ELISA
Application:	ELISA

Product Details

Purpose:	The Yes Biotech Neonatal TSH quantitative enzyme immunoassay described as a solid phase enzyme linked immunosorbent assay (ELISA). Monoclonal antibodies, specific to TSH, have been bound to the surface of each microplate well. During the course of the assay, a blood sample (collected on filter paper) is added to the microplate wells with Sample Buffer and incubated overnight. After washing the microplate to remove the filter paper and unbound component of the sample, a standardized preparation of horseradish peroxidase-conjugated monoclonal antibody specific for TSH unit is added to each well and incubated. The TSH, if present in the sample, will bind to the antibody on the coated well and will form an Antibody-TSH-Antibody-HRP
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Components:	Standards: 1 set/2 vials

Target Details

Target:	NN-TSH

Target Details

Alternative Name:	Thyroid Stimulating Hormone (TSH) Neonatal (NN-TSH Products)
Background:	Thyroxine (T4) and triiodothyronine (T3) are secreted from the thyroid gland and regulated by a sensitive feedback system involving the hypothalamus and pituitary gland. The hypothalamus releases the thyrotropin releasing hormone (TRH), which stimulates the pituitary to release the thyroid stimulating hormone (TSH). This causes the thyroid to release T3 and T4 and these in turn regulate the release of TRH and TSH via a feedback control mechanism. Thyroxine levels are generally found to be high in the serum of untreated patients with hyperthyroidism. Therefore, T4 may act as an indicator of the thyroidal state. Circulating T4 is almost exclusively bound by TBG. In order to quantitate total thyroxine in serum, the T4 must first be released from the native serum binding protein. This protein must also be inhibited from further participation in the assay.The ANOGEN Coated well immunoenzymatic assay for the quantitative measurement of serum T4 utilizes a solid phase coupled antibody and a conjugated T4. The sample to be assayed is incubated with the solid phase coupled antibody and conjugated T4. The conjugated T4 competes with T4 from the sample for available binding sites on the antibody. After the incubation period, the wells are decanted. Both conjugated and unconjugated T4 bound to the antibody during the incubation remain on the solid phase. The substrate and the stopping solution are added to provide a color. The wells are counted in a microplate reader. Standards of known T4 concentrations are run concurrently with the samples being assayed and a standard curve is plotted. The unknown T4 concentration in each sample is calculated from this curve. LIMITATIONS OF THE PROCEDURE 1. Reliable and reproducible results will be obtained when the assay procedure is carried out with a strict adherence to the exact procedure described within this package insert and good laboratory practice. 2. The T4 concentration should be used only as an adjunct to other data (ex. results of other tests, clinical impressions, etc.) available to the physician who can take into consideration the history of the patient. Each laboratory should compile its own normal ranges, if possible. This kit is suitable for use with serum of human origin only. 3. A maximal total pipetting time of ten (1) minutes per run is suggested. S7.5(3) T4

Application Details

Plate:	Pre-coated
Restrictions:	For Research Use only

Handling

Preservative:	Without preservative