

# **KOS Diagnostic Lab**

(A Unit of KOS Healthcare)



Dr. Vinay Chopra MD (Pathology & Microbiology) Chairman & Consultant Pathologist

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**NAME** : Dog DAISY

**AGE/ GENDER** : 04 YRS/MALE **PATIENT ID** :1711750

**COLLECTED BY** REG. NO./LAB NO. :012412300028

REFERRED BY **REGISTRATION DATE** : 30/Dec/2024 01:33 PM BARCODE NO. **COLLECTION DATE** : 30/Dec/2024 01:34PM :01523216 CLIENT CODE. : KOS DIAGNOSTIC LAB REPORTING DATE : 30/Dec/2024 03:45PM

**CLIENT ADDRESS** : 6349/1, NICHOLSON ROAD, AMBALA CANTT

Unit **Test Name Value Biological Reference interval** 

# ENDOCRINOLOGY

### THYROID FUNCTION TEST: FREE

FREE TRIIODOTHYRONINE (FT3): SERUM by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)	2.44	pg/mL	1.60 - 3.90
FREE THYROXINE (FT4): SERUM by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)	1.34	ng/dL	0.70 - 1.50
THYROID STIMULATING HORMONE (TSH): SERUM by CMIA (CHEMILUMINESCENT MICROPARTICLE IMMUNOASSAY)	$< 0.010^{L}$	μIU/mL	0.35 - 5.50

#### 3rd GENERATION, ULTRASENSITIVE

#### INTERPREATION:

- 1. FT3 & FT4 are metabolic active form of thyroid harmones and correlate much better with clinical condition of the patient as compared to Total T4 levels. High FT3 & FT4 with normal TSH Levels and abnormal thyroid function (Total Thyroid) can occasionally be seen in cases of PERIPHERAL THYROID HARMONE TESTITATION.
- 2. TSH levels are subjected to circardian variation, reaching peak levels between 2-4 a.m and at a minimum between 6-10 pm. The variation is of the order of 50 %. Hence time of the day has influence on the measured serum TSH concentration.

## **INCREASED TSH LEVELS**

- 1. Primary hypothyroidism is accompanied by depressed serum FT3 & FT4 values and elevated serum TSH levels. Primary or untreated hypothyroidism may vary from 3 times to more than 100 times normal depending upon degree of hypofunction.
- 2. Hypothyroid patients receiving insufficient thyroid replacement therapy.
- 3. Hashimotos thyroiditis
- DRUGS: Amphetamines, idonie containing agents & dopamine antagonist.
   Neonatal period, increase in 1st 2-3 days of life due to post-natal surge

## **DECREASED TSH LEVELS:**

- Primary hyperthyroidism is accompanied by elevated serum FT3 & FT4 values along with depressed TSH levels.
   Toxic multi-nodular goitre & Thyroiditis.
   Over replacement of thyroid hormone in treatment of hypothyroidism.

- 3. Autonomously functioning Thyroid adenoma
- 4. Secondary pituatary or hypothalmic hypothyroidism
- 5. Acute psychiatric illness
- Severe dehydration.
   DRUGS: Glucocorticoids, Dopamine, Levodopa, T4 replacement therapy, Anti-thyroid drugs for thyrotoxicosis.
   Pregnancy: 1st Trimester

## NOTE:

1. High FT3 levels accompanied by normal FT4 levels and depressed TSH levels may be seen T3 thyrotoxicosis, central hypothyroidism occurs due to pituitary or thalamic malfunction

2. Secondary & Tertlary hypothyroidism, this relatively rare but important condition is indicated by presence of low serum FT3 and FT4 levels, in conjugation with TSH levels that are paradoxically either low/normal or are not elevated to levels that are expected.

\*\*\* End Of Report \*\*\*



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