

# TBG, Thyroxine binding globulin

## General:

Thyroxine-binding globulin (TBG) binds thyroid hormone in circulation. It is one of three proteins (along with transthyretin and albumin) responsible for transport of the thyroid hormones thyroxine (T4) and 3,5,3'-triiodothyronine (T3) in the bloodstream. Of these three proteins, TBG has the highest affinity for T4 and T3, but is present in the lowest concentration. Despite its low concentration, TBG carries the majority of T4 in serum. Due to the very low serum concentrations of T4 & T3, TBG is rarely more than 25% saturated with its ligand. Unlike transthyretin and albumin, TBG has a single binding site for T4/T3. TBG is synthesized primarily in the liver as a 54 kDa protein. Genomically, TBG is a serpin, although it has no inhibitory function like many other members of this class of proteins.

Material: 1 ml serum, **Frozen**

TAT: 2 weeks\*

Method: RIA

Units: mg/l

Ref.- range:	<1 year	22.0 – 42.0
	1 – 10 years	14.0 – 36.0
	>10 years	10.9 – 34.9

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>