RSR

TECHNICAL INFORMATION

TSH RECEPTOR (TSHR) AUTOANTIBODY THIRD GENERATION ELISA KIT

ElisaRSR™ TRAb 3rd Generation
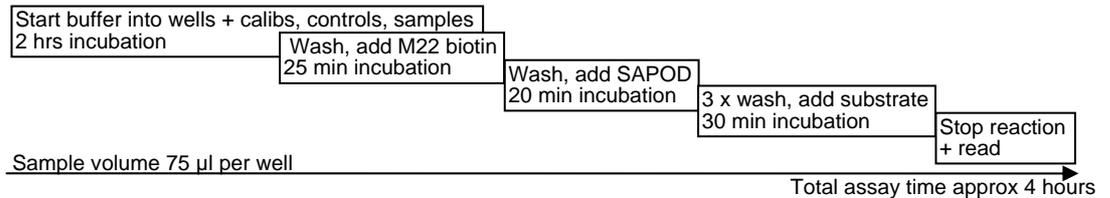
CE

98/79/EC

Description:	Enzyme linked immunosorbent assay (ELISA) kit for the determination of autoantibodies to the TSH receptor (TSHR) in serum. Method based on inhibition of a human monoclonal TSHR autoantibody (M22) binding.
Disease application:	Graves' disease

Assay method:

Start buffer into wells + calibs, controls, samples
2 hrs incubation

Wash, add M22 biotin
25 min incubation

Wash, add SAPOD
20 min incubation

3 x wash, add substrate
30 min incubation

Stop reaction
+ read

Sample volume 75 µl per well

Total assay time approx 4 hours

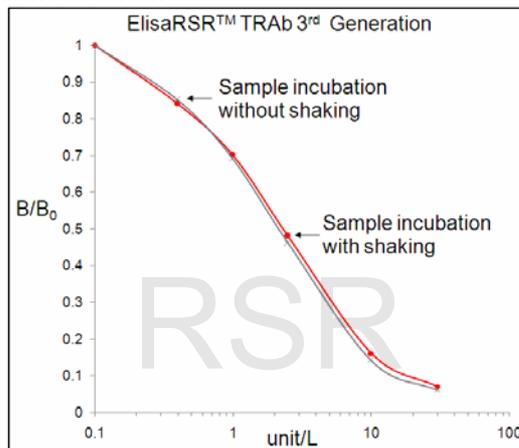|		
Sensitivity:	95%	n = 108 for Graves' disease (treated and untreated patients)
Specificity:	100%	n = 139 for healthy blood donors
Calibrator range:	0.4 - 30 units/L (units: NIBSC 90/672)	
Cut-off:	Negative: <0.4 units/L; Positive: $\geq$ 0.4 units/L	
Lower detection limit:	0.08 units/L (mean - 2 standard deviations in assay of negative control; n = 50)	
Advantages:	A highly sensitive non-isotopic assay suitable for use in routine clinical laboratories and easily automated. It offers the best disease specificity and sensitivity of all TSHR autoantibody assays currently available.	
Kit size:	96 wells	
Order code:	TRE/96/3A	
Literature:	B Rees Smith et al A new assay for thyrotropin receptor autoantibodies Thyroid 2004 **14**: 830-835 K Kamijo et al Clinical evaluation of 3rd generation assay for thyrotropin receptor antibodies: The M22-biotin-based ELISA initiated by Smith Endocrine Journal 2005 **52**: 252-529 A Theodoraki et al Performance of a third-generation TSH-receptor antibody in a UK clinic Clinical Endocrinology 2011 **75**: 127-133	

Shaking during sample incubation:

Shaking the ELISA plate during sample incubation has little effect.

See also: -
ElisaRSR™ TRAb Fast™
ElisaRSR™ TRAb 2nd Generation