

▶ **Anti-Th/To Antibody**

The **Th/To** antibody has been shown to be highly specific for patients with systemic scleroderma (SSc). It is present in 10-19% of patients with diffuse cutaneous SSc. The clinical features of anti-Th/To antibodies are: SSc with mild skin and systemic involvement, severe pulmonary fibrosis with worse prognosis and pulmonary hypertension. Anti-Th/To can also be found in 3% of patients with primary Raynaud's disease.

Hardin JA et al (1982) identified the anti-Th antibody from one patient (Th) whose serum precipitated the snRNP containing 7-2 RNA of a 32-P labeled HeLa cell extract. Reddy, et al (1983) reported that a single antibody from a patient with SSc was found to immunoprecipitate RNP from Novikoff hepatoma cells that contained the 7-2 RNA and 8-2 RNA. This antibody was designated "anti-To". In 2002, Eenennaam, et al unequivocally defined the identity of the Th/To autoantigen and demonstrated that Th/To autoepitopes are found on several protein subunits of RNase MPP/RNase P.

The anti-Th/To antibody detection is an RDL in-house bioassay for the qualitative determination of Th/To antibodies in serum by immunoprecipitation. The Th/To antibody assay will be labeled as an "Analytic Specific Reagent (ASR)".

Test Code: 233

Methodology: Immunoprecipitation (IPP)

CPT Code: 83519

Specimen Requirement: Serum (or EDTA plasma can be used) 1 mL, ambient, refrigerated or frozen. (Minimum: 0.5 mL)

Specimen Stability: Ambient 2 days, refrigerated 7 days and frozen 6 months.

Normal Range: Negative

Turn Around Time: 5 days