SCRIPPS LABORATORIES

Technical Brief

Recombinant Troponin ITC Complex

Assays for the cardiac-specific forms of troponin I (TnI) and troponin T (TnT) are a cornerstone of cardiovascular diagnostics. The development of high-sensitivity assays for TnI and TnT has expanded their clinical utility beyond acute myocardial infarction (AMI) detection alone. In addition to AMI diagnosis, TnI and TnT assays are valuable for identifying unstable angina, cardiac muscle injury and apoptosis, and in assessing risk in patients with myocardial injury.

Central to these clinical applications is the ability to detect all circulating forms of cardiac troponin. Accordingly, assays for TnI and TnT must also detect the ternary troponin ITC (Tn-ITC) complex. Scripps Laboratories developed an all-recombinant Tn-ITC complex for use in assay development, calibrator and control manufacturing, and antibody production.

SDS-PAGE
Figure 1 presents an SDS-PAGE image of purified recombinant troponin subunits--TnI, TnC, TnT--and purified recombinant Tn-ITC complex. The purity of each subunit and the complex is >95% under reduced/heated sample conditions.

HPLC
The HPLC elution profile for recombinant Tn-ITC complex, is shown in Figure 2. The chromatogram reveals a main peak eluting at 15.593 minutes with a small shoulder at 14.879 minutes. Purity of the Tn-ITC complex is >95%.

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Recombinant Tn-ITC Complex from Scripps is suitable for research use, calibrator and control development, antibody production, and large-scale diagnostic assay manufacturing. Two purities are available to suit your specific needs. Use the links at right to learn more.

SDS-PAGE

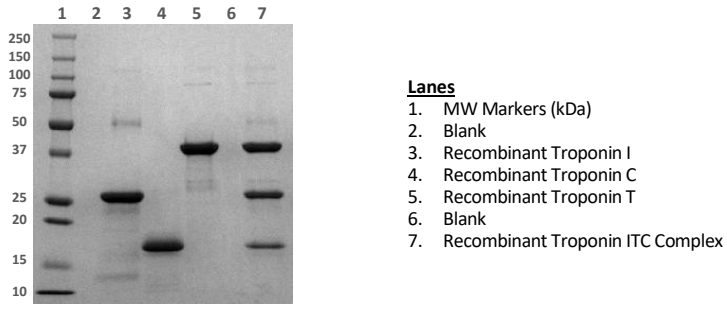

Figure 1. SDS-PAGE of Recombinant TnI (lane 3), TnC (lane 4), TnT (lane 5), and Tn-ITC Complex (lane 7) under reduced/heated sample conditions.

HPLC

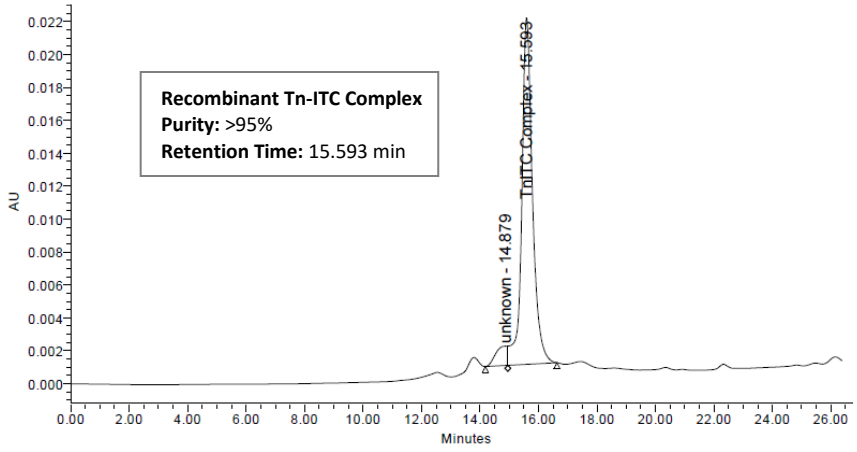

Figure 2. HPLC analysis of purified Recombinant Tn-ITC Complex. Analysis was performed using a Biozen 3 µm dSEC-2, 200 Å, 300 x 7.8 mm column.

Ordering Information

Product Description	Cat. No.	Part No.	Purity	
Recombinant Tn ITC Complex	T0522	90708	≥95%	*View T0522-90708*
	T0521	90707	≥50%	*View T0521-90707*

Expressed Without Affinity Tags

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