

Life Diagnostics, Inc.

610-431-7707 • Fax: 610-431-7818

Info@lifediagnostics.com • www.lifediagnostics.com

Rat Skeletal Muscle Troponin-I

Catalog No.	3102
Analysis	SDS PAGE: Major ~21-22 kDa band.
Purity	≥95%
Concentration	0.1 - 1 mg/ml
Buffer	8 M Urea, 50 mM TrisCl (pH 7.4), 100 mM NaCl, 2 mM EDTA, 5 mM β-mercaptoethanol
Storage	-20 to -70°C
Source	Fresh frozen rat skeletal muscle.

Troponin I (TnI) is one of three subunits that form the troponin complex of the thin filaments of striated muscle. The troponin complex serves as a calcium-sensitive switch that regulates striated muscle contraction. Troponin I binds actin and inhibits actomyosin ATPase activity in the absence of calcium. Skeletal muscle troponin I exists in two isoforms, TnI-fast and TnI-slow, expressed respectively in fast and slow-twitch muscle fibers. The two isoforms are characterized by molecular weights ~ 21 kDa (fast) and 22 kDa (slow). The ratios of slow and fast isoforms vary with muscle source and species. Skeletal muscle TnI offered by Life Diagnostics, Inc., is a mixture of slow and fast isoforms. It is purified by ion-exchange chromatography in conjunction with calcium dependent affinity chromatography on troponin-C agarose.

P.O. Box 5205 • West Chester PA 19380 • USA