

Life Diagnostics, Inc.

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Pig Skeletal Muscle Troponin-I

Catalog No.	3510
Analysis	SDS PAGE: ~21 & 22 kDa bands indicative of fast and slow twitch isoforms of skeletal muscle Troponin-I. Minor low molecular weight TnI fragments are apparent.
Purity	≥95%
Concentration	0.5 – 2.5 mg/ml
Buffer	8 M Urea, 50 mM TrisCl (pH 7.4), 100 mM NaCl, 1 mM EDTA, 15 mM β-mercaptoethanol
Storage	-20 to -70°C
Source	Fresh frozen Pig 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.

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