Life Diagnostics, Inc.

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Rabbit Skeletal Muscle Troponin-I

Catalog No. 3110

Analysis SDS PAGE: Major ~21-22 kDa band.

Purity ≥95%

Concentration 0.5 - 2 mg/ml (Assuming $A_{280} = 0.406$ for a

1mg/ml solution at a path length of 1cm)

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 rabbit 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 likely 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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