## Life Diagnostics, Inc.

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## Chicken Skeletal Muscle Troponin-I

Catalog No. 3610

Analysis SDS PAGE: Major 21-22 kDa band. Minor low

molecular weight TnI fragments are apparent.

Purity ≥95%

Concentration 0.25 - 2.5 mg/ml (Bradford assay vs. BSA)

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 Chicken 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.