

# **California Bioscience**

# **Product Datasheet**

Product Name	Fast skeletal Troponin I Human Recombinant
Cata No	CB500962
Source	Escherichia Coli.
Synonyms	Troponin I fast skeletal muscle, Troponin I fast-twitch isoform, TNNI2, DA2B, FSSV, fsTnI, AMCD2B

# Description

TNNI2 is a fast-twitch skeletal muscle protein, belongs to the troponin I gene family, and is part of the troponin complex including troponin T, troponin C and troponin I subunits. The troponin complex, together with tropomyosin, is responsible for the calcium-dependent regulation of striated muscle contraction. TNNI2 is also present in vascular smooth muscle and may play a role in regulation of smooth muscle function. Other than muscle tissues, TNNI2 is found in corneal epithelium, cartilage where it is an inhibitor of angiogenesis to inhibit tumor growth and metastasis, and mammary gland where it functions as a coactivator of estrogen receptor-related receptor alpha. Furthermore, TNNI2 suppresses tumor growth in human ovarian carcinoma. Mutations in the TNNI2 gene cause myopathy and distal arthrogryposis type 2B. Skelatal isoforms of Troponin I were suggested to be used as markers of acute and chronic skelatal muscle injuries. In skelatal muscles Troponin I is

presented by two forms, slow (21,6 kDa) and fast (21,2 kDa) skelatal.

### **Physical Appearance**

Sterile Filtered colourless liquid formulation.

#### Purity

Greater than 95.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

# Formulation

Each mg of protein contains 50% glycerol.

#### Stability

FsTnl although stable at  $10^{\circ}$  for 7 days, should be stored desiccated below -18°C.

Please prevent freeze-thaw cycles.

#### **Applications**

Immunoassays and western blot.