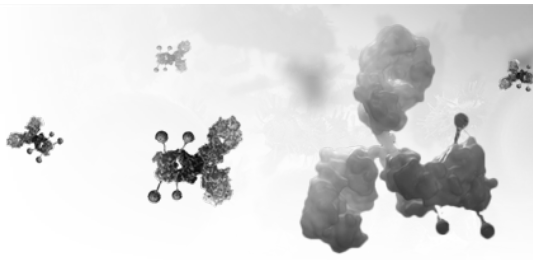

Rabbit Anti-Human Troponin I monoclonal antibody, clone 2I22M20 (CABT-L1648)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Target	Troponin I
Immunogen	human Troponin I
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Clone	2I22M20
Purification	Purified
Conjugate	Unconjugated
Applications	ICC, IHC, IF, WB
Format	Liquid
Concentration	0.5 mg/ml
Buffer	PBS
Preservative	0.09% Sodium Azide
Storage	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

BACKGROUND

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Introduction	Troponin and tropomyosin are the main proteins responsible for calcium regulation of actin-myosin interactions. Tropomyosin is a rod-shaped molecule that binds in the groove of the actin helix, and prevents the attachment of the myosin fiber heads. The troponin complex consists of three polypeptide subunits, troponin T, troponin I, and troponin C. Troponin T (for tropomyosin binding unit) attaches the troponin complex to tropomyosin which results in tropomyosin being situated in the myosin-binding site on the actin molecule. Troponin I (for inhibitory subunit) binds to actin and troponin T, and this complex inhibits actin-myosin binding even in the presence of calcium. Troponin C (for calcium-binding subunit) binds to troponin T and troponin I, and makes the complex dependent upon calcium. With calcium present, troponin C binds up to 4 molecules and changes the position of the troponin and tropomyosin complex, so that myosin is able to bind to the actin filament. Troponin I is present in three different isoforms in mammals, a slow-twitch skeletal muscle-specific form, a fast-twitch muscle-specific form, and a cardiac muscle-specific form.
Keywords	skeletal and cardiac troponin I

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