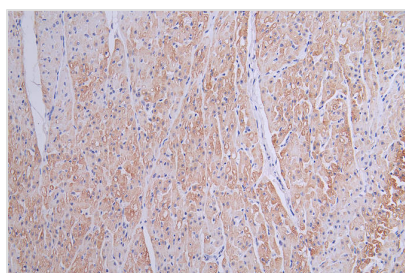




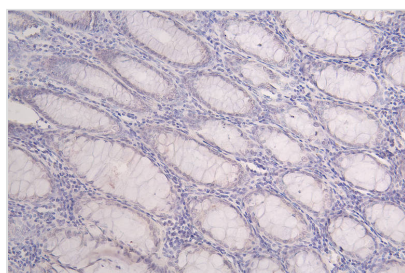
TNNT2 Recombinant Monoclonal Antibody

Product Code	CSB-RA058699A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P45379
Immunogen	A synthesized peptide derived from Human TNNT2
Species Reactivity	Human
Tested Applications	ELISA, IHC, FC; Recommended dilution: IHC:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cardiovascular;Signal transduction?Stem cells
Gene Names	TNNT2
Clone No.	8H8

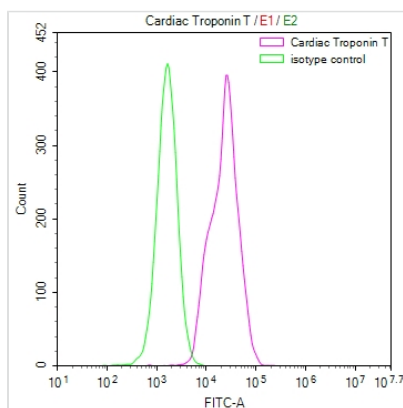
Image



IHC image of CSB-RA058699A0HU diluted at 1:50 and staining in paraffin-embedded human heart tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.16% DAB.



IHC image of CSB-RA058699A0HU diluted at 1:50 and staining in paraffin-embedded human rectal cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.16% DAB.



Overlay Peak curve showing MCF-7 cells stained with CSB-RA058699A0HU (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1 μ g/1 \times 10⁶ cells) for 45min at 4 $^{\circ}$ C. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4 $^{\circ}$ C. Control antibody (green line) was rabbit IgG (1 μ g/1 \times 10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The TNNT2 recombinant monoclonal antibody generation is a multi-step in vitro process. Initially, TNNT2 antibody genes are extracted from B cells isolated from immunoreactive rabbits. These genes undergo amplification and are cloned into suitable phage vectors, which are subsequently introduced into mammalian cell lines to facilitate the production of functional antibodies. The resulting TNNT2 recombinant monoclonal antibody is purified through affinity chromatography. It can be used to detect human TNNT2 protein in ELISA, IHC, and FC applications.

TNNT2 is a critical protein in cardiac muscle, where it regulates muscle contraction and relaxation by sensing changes in intracellular calcium levels. Its role in the troponin complex ensures proper heart function and the efficient pumping of blood throughout the circulatory system.