

Cardiogenesis Marker Antibody Sampler Kit

Cat# AK0133

Upon receipt, store at -20°C. Avoid freeze/thaw cycles.

PRODUCT DESCRIPTION

Cardiogenesis is a complex developmental event involving numerous transcription factors. NKX2.5 is a member of the NKX homeobox transcription factor family, which plays an essential role in heart development and is among the earliest factors expressed in the cardiac lineage in developing embryos. Mutations in NKX2.5 are associated with several congenital heart conditions, such as atrial defect with atrioventricular conduction defects (ASD-AVCD) and Tetralogy of Fallot (TOF). GATA proteins comprise a group of transcription factors that are related by the presence of conserved zinc finger DNA binding domains, which bind directly to the nucleotide sequence core element GATA. GATA-6 plays a critical role in endoderm development and knock out of GATA-6 is embryonic lethal due to defects in formation of the heart tube and a failure to develop extraembryonic endoderm. MEF2C is a member of the MEF2 (myocyte enhancer factor 2) family of transcription factors. The MEF2 family members were originally described as muscle-specific DNA binding proteins that recognize MEF2 motifs found within the promoters of many muscle-specific genes. α -Actinin was first recognized as an actin cross-linking protein. The α -actinin protein interacts with a large number of proteins involved in signaling to the cytoskeleton, including those involved in cellular adhesion, migration, and immune cell targeting. The muscle isoforms 2 and 3 (ACTN2, ACTN3) localize to the Z-discs of striated muscle and to dense bodies and plaques in smooth muscle. Troponin, working in conjunction with tropomyosin, functions as a molecular switch that regulates muscle contraction in response to changes in the intracellular Ca²⁺ concentration. Troponin consists of three subunits: the Ca²⁺-binding subunit troponin C (TnC), the tropomyosin-binding subunit troponin T (TnT), and the inhibitory subunit troponin I (TnI). Assays for measuring serum concentrations of cardiac muscle TnT (cTNT), as well as cTnI, have been reported for analyzing cardiac injury. Connexin 43 (Cx43) i

PRODUCT INCLUDES

Cat No.	Product name	Quantity	Applications	Reactivity	Host
A340589	MEF2C Polyclonal Antibody	20 μ L	WB, IHC, ELISA	Human, Mouse	Rabbit
A340692	TNNI3 Polyclonal Antibody	20 μ L	WB, IHC, ELISA	Human, Mouse, Rat	Rabbit
A340400	TNNT2 Polyclonal Antibody	20 μ L	WB, ELISA	Human, Mouse, Rat	Rabbit

A1013s	Goat Anti-Rabbit IgG (H+L) (peroxidase/HRP conjugated)	120μL	WB, ELISA	Rabbit	Goat
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PRODUCT USE LIMITATION

These products are intended for research use only.