10320 Camino Santa Fe, Suite G
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Anti-Islet1 Monoclonal Antibody
Catalog # ABO14777

Specification

Anti-Islet1 Monoclonal Antibody - Product Information

Application	**WB, IHC, IF, ICC, IP, FC**
Primary Accession	P61371
Host	**Rabbit**
Isotype	**Rabbit IgG**
Reactivity	**Human**
Clonality	**Monoclonal**
Format	**Liquid**

Description
Anti-Islet1 Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human.

Anti-Islet1 Monoclonal Antibody - Additional Information

Gene ID 3670

Other Names
Insulin gene enhancer protein ISL-1, Islet-1, ISL1

Application Details
WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
IP 1:50
FC 1:50

Contents
Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen
A synthesized peptide derived from human Islet1 ISL1 (ISL1 transcription factor, LIM/homeodomain) is a member of the LIM/homeodomain family of transcription factors. It binds to the enhancer region of the insulin gene, among others, and may play an important role in regulating insulin gene expression. It is central to the development of pancreatic cell lineages and may also be required for motor neuron generation. Islet-1 expression defines cardiac progenitor cell populations and is required for normal cardiac development and asymmetry.

Purification
Affinity-chromatography

Storage	**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

Anti-Islet1 Monoclonal Antibody - Protein Information

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Name ISL1

Function
DNA-binding transcriptional activator. Recognizes and binds to the consensus octamer binding site 5'-ATAATTAA-3' in promoter of target genes. Plays a fundamental role in the gene regulatory network essential for retinal ganglion cell (RGC) differentiation. Cooperates with the transcription factor POU4F2 to achieve maximal levels of expression of RGC target genes and RGC fate specification in the developing retina. Involved in the specification of motor neurons in cooperation with LHX3 and LDB1 (By similarity). Binds to insulin gene enhancer sequences (By similarity). Essential for heart development. Marker of one progenitor cell population that give rise to the outflow tract, right ventricle, a subset of left ventricular cells, and a large number of atrial cells as well, its function is required for these progenitors to contribute to the heart. Controls the expression of FGF and BMP growth factors in this cell population and is required for proliferation and survival of cells within pharyngeal foregut endoderm and adjacent splanchnic mesoderm as well as for migration of cardiac progenitors into the heart (By similarity).

Cellular Location
Nucleus {ECO:0000250|UniProtKB:P61372}.

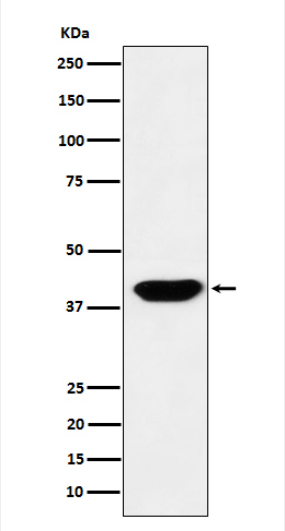
Tissue Location
Expressed in subsets of neurons of the adrenal medulla and dorsal root ganglion, inner nuclear and ganglion cell layers in the retina, the pineal and some regions of the brain

Anti-Islet1 Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Islet1 Monoclonal Antibody - Images



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Western blot analysis of Islet1 expression in HeLa cell lysate.