

Anti-Islet 1 Rabbit Monoclonal Antibody

Catalog # ABO13894

Product Information

Application	WB, IF, ICC, IP
Primary Accession	P61371
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-Islet 1 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, IP applications. This antibody reacts with Human, Mouse.

Additional Information

Gene ID	3670
Other Names	Insulin gene enhancer protein ISL-1, Islet-1, ISL1
Calculated MW	39036
Application Details	WB 1:1000-1:2000 ICC/IF 1:50-1:200 IP 1:50
Subcellular Localization	Nucleus.
Tissue Specificity	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.
Source	Eukaryota
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.
Clone Names	Clone: EHO-9
Immunogen	A synthesized peptide derived from human Islet 1
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.

Protein Information

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

Images

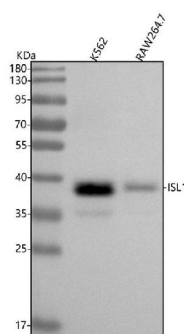


Figure 1. Western blot analysis of Islet 1 using anti-Islet 1 antibody (M02969).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human K562 whole cell lysates,

Lane 2: mouse RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Islet 1 antigen affinity purified monoclonal antibody (Catalog # M02969) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Islet 1 at approximately 39 kDa. The expected band size for Islet 1 is at 39 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.