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Mouse Isl1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20999c

Product Information

Application	WB, E
Primary Accession	P61372
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB51489
Calculated MW	39036

Additional Information

Gene ID	16392
Other Names	Insulin gene enhancer protein ISL-1, Islet-1, Isl1
Target/Specificity	This Mouse Isl1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 302-336 amino acids from the C-terminal region of mouse Isl1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Isl1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Isl1
Function	DNA-binding transcriptional activator (PubMed: 14664703, PubMed:18539116, PubMed:22343712, PubMed:24643061, PubMed:25775587). Recognizes and binds to the consensus octamer binding site 5'-ATAATTAA- 3' in promoter of target genes (PubMed:18539116, PubMed:24643061, PubMed:25775587). Plays a fundamental role in the gene

regulatory network essential for retinal ganglion cell (RGC) differentiation (PubMed:25775587). Cooperates with the transcription factor POU4F2 to achieve maximal levels of expression of RGC target genes and RGC fate specification in the developing retina (PubMed:24643061, PubMed:25775587). Involved in the specification of motor neurons in cooperation with LHX3 and LDB1 (PubMed:18583962). 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 (PubMed:14667410).

Cellular Location [Isoform 1]: Nucleus

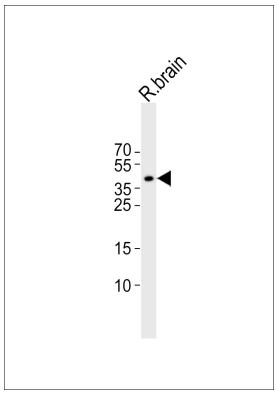
Background

Binds and regulates the promoters of the insulin, glucagon and somatostatin genes. Involved in the specificarion of motor neurons in cooperation with LHX3 and LDB1.

References

Ando K.,et al.J. Mol. Endocrinol. 31:419-425(2003).
Koehler K.,et al.Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases.
Bhati M.,et al.EMBO J. 27:2018-2029(2008).

Images



Western blot analysis of lysate from rat brain tissue lysate, using Isl1 Antibody (C-term)(Cat. #AP20999c). AP20999c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.

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