

ISL1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP16352c**Specification**

ISL1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P61371](#)**ISL1 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 3670**Other Names**

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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ISL1 Antibody (Center) Blocking Peptide - 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

ISL1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ISL1 Antibody (Center) Blocking Peptide - Images

ISL1 Antibody (Center) Blocking Peptide - Background

ISL1 is a member of the LIM/homeodomain family of transcription factors. The encoded protein binds to the enhancer region of the insulin gene, among others, and may play an important role in regulating insulin gene expression. The encoded protein is central to the development of pancreatic cell lineages and may also be required for motor neuron generation. Mutations in this gene have been associated with maturity-onset diabetes of the young.

ISL1 Antibody (Center) Blocking Peptide - References

De Luca, A., et al. Clin. Genet. (2010) In press : Davis, O.S., et al. Behav. Genet. (2010) In press : Genead, R., et al. Stem Cell Res 4(1):69-76(2010) Stevens, K.N., et al. PLoS ONE 5 (5), E10855 (2010) : Zhang, H., et al. J. Mol. Biol. 392(3):566-577(2009)