

ISLET-1 / ISL1 Antibody (clone 1H9)
Mouse Monoclonal Antibody
Catalog # ALS14408**Specification**

ISLET-1 / ISL1 Antibody (clone 1H9) - Product Information

Application	WB, IHC-P, IF, E
Primary Accession	P61371
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	39kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200 E~~N/A

ISLET-1 / ISL1 Antibody (clone 1H9) - Additional Information**Gene ID** 3670**Other Names**

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

Target/Specificity

Human ISL1

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

ISLET-1 / ISL1 Antibody (clone 1H9) is for research use only and not for use in diagnostic or therapeutic procedures.

ISLET-1 / ISL1 Antibody (clone 1H9) - 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}.

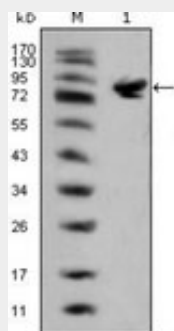
Tissue Location

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

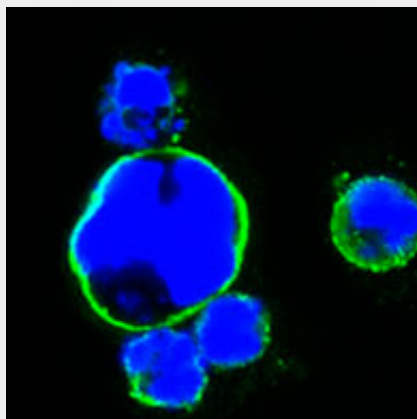
ISLET-1 / ISL1 Antibody (clone 1H9) - Protocols

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

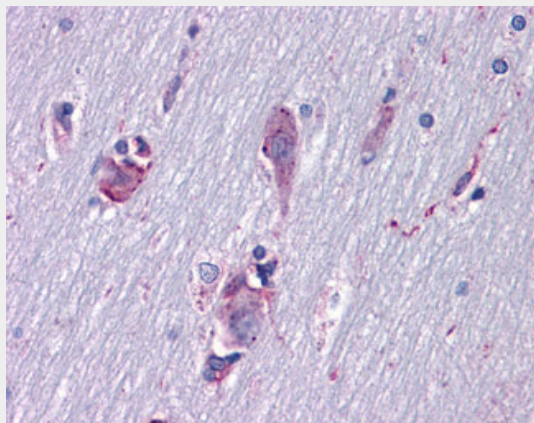
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ISLET-1 / ISL1 Antibody (clone 1H9) - Images

Western blot using ISL1 mouse monoclonal antibody against full-length ISL1 (aa1-349)-hlgGFc...



Confocal immunofluorescence of HEK293 cells transfected with full-length ISL1-hlgGFc using ISL1...



Anti-ISL1 / Islet 1 antibody IHC of human brain, cortex.

ISLET-1 / ISL1 Antibody (clone 1H9) - Background

Binds and regulates the promoters of the insulin, glucagon and somatostatin genes. Involved in the specification of motor neurons in cooperation with LHX3 and LDB1 (By similarity).

ISLET-1 / ISL1 Antibody (clone 1H9) - References

Wang M., et al. Endocrinology 134:1416-1422(1994).
Tanizawa Y., et al. Diabetes 43:935-941(1994).
Tanizawa Y., et al. Diabetes 43:1171-1171(1994).
Zahedi R.P., et al. J. Proteome Res. 7:526-534(2008).