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ISLET-1 / ISL1 Antibody (clone 1H9)

Mouse Monoclonal Antibody
Catalog # ALS14408

Specification

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

Application	**WB, IF, IHC**
Primary Accession	P61371
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**39kDa KDa**

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}.

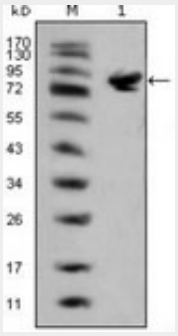
Tissue Location
Expressed in subsets of neurons of the adrenal medulla and dorsal root ganglion, inner nuclear and ganglion cell layers in the retina, the pineal and some regions of the brain

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

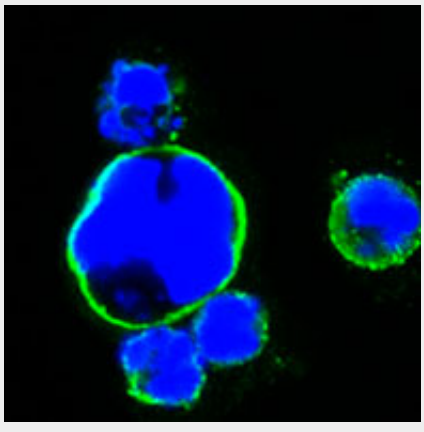
Provided below are standard protocols that you may find useful for product applications.

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

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

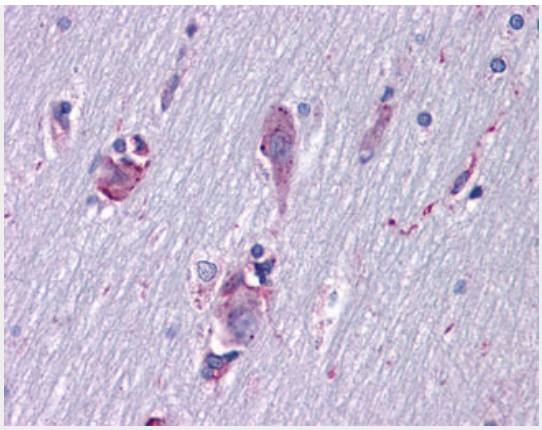


Western blot using ISL1 mouse monoclonal antibody against full-length ISL1 (aa1-349)-hIgGFc...



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

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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 specificarion 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).