

INSM1 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al10397

Specification

INSM1 antibody - C-terminal region - Product Information

Application WB
Primary Accession 001101

Other Accession NM 002196, NP 002187

Reactivity Human, Pig, Horse, Bovine, Dog

Predicted Human, Pig, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 53kDa KDa

INSM1 antibody - C-terminal region - Additional Information

Gene ID 3642

Alias Symbol IA1, IA-1

Other Names

Insulinoma-associated protein 1, Zinc finger protein IA-1, INSM1, IA1

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-INSM1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

INSM1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

INSM1 antibody - C-terminal region - Protein Information

Name INSM1

Synonyms IA1

Function

Sequence-specific DNA-binding transcriptional regulator that plays a key role in neurogenesis and neuroendocrine cell differentiation during embryonic and/or fetal development. Binds to the consensus sequence 5'-[TG][TC][TT][GA]GGG[CG]A-3' in target promoters. Acts as a transcriptional repressor of NEUROD1 and INS expression via its interaction with cyclin CCND1 in a cell cycle- independent manner. Negatively regulates skeletal muscle-specific gene expression in endocrine cells of the pituitary by inhibiting the Notch signaling pathway. Represses target gene transcription by recruiting chromatin-modifying factors, such as HDAC1, HDAC2, HDAC3, KDM1A



and RCOR1 histone deacetylases. Binds to its own promoter, suggesting autoregulation as a self-control feedback mechanism. Competes with histone H3 for the same binding site on the histone demethylase complex formed by KDM1A and RCOR1, and thereby inhibits demethylation of histone H3 at 'Lys-4' (PubMed:23721412). Promotes the generation and expansion of neuronal basal progenitor cells in the developing neocortex. Involved in the differentiation of endocrine cells of the developing anterior pituitary gland, of the pancreas and intestine, and of sympatho-adrenal cells in the peripheral nervous system. Promotes cell cycle signaling arrest and inhibition of cellular proliferation.

Cellular Location

Nucleus {ECO:0000250|UniProtKB:Q63ZV0}.

Tissue Location

Expressed in pancreatic duct cells. Expressed in several tumor cell lines of neuroendocrine origin including pheochromocytoma, medullary thyroid carcinoma, insulinoma, medulloblastoma, retinoblastoma, pheochromacytoma, medullary thyroid carcinoma and small cell lung carcinoma.

INSM1 antibody - C-terminal region - 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