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INSM1 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI10397

Product Information

Application	WB
Primary Accession	Q01101
Other Accession	NM_002196, NP_002187
Reactivity	Human, Pig, Dog, Bovine
Predicted	Human, Pig, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52923

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.

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][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.

References

Breslin,M.B., et al., (2003) J. Biol. Chem. 278 (40), 38991-38997Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

Images

WB Suggested Anti-INSM1 Antibody Titration: .2-1 ug/ml
Positive Control: Human Lung