

## **INSM1 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56356

## **Specification**

## **INSM1 Polyclonal Antibody - Product Information**

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>Q01101</u>

Reactivity
Host
Rat, Pig, Bovine
Rabbit
Rescue State S

Clonality Polyclonal
Calculated MW 53 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

from human INSM1

Epitope Specificity 1-100/510

Isotype IgG Purity

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nuclear

SIMILARITY Contains 5 C2H2-type zinc fingers.

Important Note This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

## **Background Descriptions**

affinity purified by Protein A

Insulinoma-associated 1 (INSM1) gene is intronless and encodes a protein containing both a zinc finger DNA-binding domain and a putative prohormone domain. This gene is a sensitive marker for neuroendocrine differentiation of human lung tumors. [provided by RefSeq, Jul 2008]

# **INSM1** Polyclonal Antibody - Additional Information

## **Gene ID 3642**

#### **Other Names**

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

## Target/Specificity

Several tumor cell lines of neuroendocrine origin including pheochromocytoma, medullary thyroid carcinoma, insulinoma, pituitary tumor, and small cell lung carcinoma. Not found in any of the normal tissues tested.

# **Dilution**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class</pre>

="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class

="dilution\_IF">IF $\sim$ 1:50 $\sim$ 200</span><br \><span class ="dilution\_ICC">ICC $\sim$ N/A</span><br \><span class ="dilution\_E">E $\sim$ N/A</span>



## **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **INSM1 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/23721412" target=" blank">23721412</a>). 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.

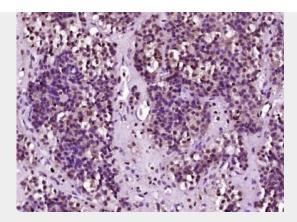
## **INSM1 Polyclonal Antibody - Protocols**

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

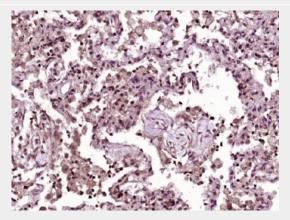
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **INSM1 Polyclonal Antibody - Images**





Paraformaldehyde-fixed, paraffin embedded (Human pituitary tumor); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (INSM1) Polyclonal Antibody, Unconjugated (bs-16675R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human lung carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (INSM1) Polyclonal Antibody, Unconjugated (bs-16675R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.