

## Product datasheet for **MC217453**

### Insm1 (NM\_016889) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Insm1 (NM_016889) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Insm1
Synonyms:	IA-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >MC217453 representing NM\_016889  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCCCGCGGGTTTCTGGTGAAGCGCAGCAAGAAGTCCACGCCGTGTCTACCGGTCCGCGCGCGG  
 AGGACAGTGACCGGGCGCTGCTGTGTACCCGGCTGCGGGGGCGCCCGCGCCGAGCCCCGGTGCCAG  
 CCCCAGGCGCGTCCCGCCACCTCCGCGCGCGCGCTCGCGGAGCGCGCCATGCTGCGCTCGCGCGCGG  
 CTCGCTGCGCGCCAGGCCCCGCCCGCCACCCCGCCAGGCCCGCGGGCGCGCACTTCGGAACCCCCG  
 AGGCTGCGCACCCGGCGCCTCTCTACAGTCCCACGCGCGCGGTGAGCCGCGAGCAGAGAAGCACAAGTA  
 CTTGAGCGCAGCTTCAACCTGGGCTCGCCGGTGTCCGCTGAGTCCTTCCCCACGCCCGCGCGTGTCTC  
 GCAGGGGAGGACGCGCGCCAAACGGCGCTGGCGGCGCGCGCGCGCACCTGCGCGGAGACGCGCTGC  
 TCTTCGCTCCCGCGAGCTCAAGATGGGCACTGCGTTCTCCGCGCGCGCGAGGCGCGCGCGCGCTGG  
 GACCGGTCTTCACTGTCCCCCGCGCGCCCTCGGGCCCCGGGCAAGCGACCGCGCGCCCCCGCGCT  
 GTCGCTACAGAGCGCCCGCCAAAGGCGAGCAAGGCCCGAGCGCCAAAAAGCCGAAGGCCATCCGAAGC  
 TGCACTTCGAGGACGAGGTGACCACGTCCCGGTTCTGGGGCTCAAGATCAAGGAGGGCCCGGTGGAGGC  
 GCGCGGGGTGCGCGGGGGGCGCGACCCGACCCCTGGGCGAGTTCATCTGCCAGCTGTGCAAGGAGGAG  
 TACGCTGACCCGTTGCGCTGGCGCAGCACAAGTGCTCGCGCATCGTGCGGTGGAGTACCGTGCCAG  
 AGTGCGCAAGGTCTTCAGCTGCCCGGCCAACCTGGCCTCGCACCGCGCTGGCACAACACGCGCGGT  
 GCGCGCGCGCGCGCGCGCCAGAGCCAGAAGCCGCCACCAGGGCGGAGGCGCGCGAGGCTGCGGGCGGC  
 GGCAGCAGCGATCGGGACACGCCGAGCCCTGGCGGCGTATCCGAGTCAGGCTCCGAGGACGGGCTCTACG  
 AGTGCCACCACTGCGCCAAGAAGTTCGTCGCCAGGCCTATCTGCGCAAGCACCTGCTGGCACATACCA  
 GCGCGTCGAGGCCAAAGGCGCGCCCCCGCCCCCGCGCGCCGCGCCACCCCGCGGAGGACATCCTGGCT  
 TTCTACGCGGGGCGCGCAAAAAGGCGCCCCAGGAGGCCTCGGGCGACGCGAGGCGCGCGCGCTGTGG  
 GCCTGAGTGCGACCGCCAGTGCCACCTGTGCCAGTGTCGCGGGAGACCTTCCCCAGCAAGGGCGCCCA  
 GGAGCGCCACCTGCGCTGTGCAAGCTGCCAGGTGTTCCCTGCAAGTACTGCCCGGCCACCTTCTAC  
 AGCTCCCCGGGCTGACCGGCGACATCAACAAGTGCCACCCGTCTGAGAATAGACAGGTGATCCTCTTC  
 AGGTGCCTGTGCGTCCGGCTGC**TAG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_016889

**Insert Size:** 1566 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_016889.3</a> , <a href="#">NP_058585.2</a>
<b>RefSeq Size:</b>	3038 bp
<b>RefSeq ORF:</b>	1566 bp
<b>Locus ID:</b>	53626
<b>UniProt ID:</b>	<a href="#">Q63ZV0</a>
<b>Cytogenetics:</b>	2 G1
<b>Gene Summary:</b>	<p>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' (By similarity). 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.[UniProtKB/Swiss-Prot Function]</p>