

# Datasheet for ABIN3135567 INSM1 Protein (AA 1-521) (His tag)



[Go to Product page](#)

## 1 Image

### Overview

Quantity:	1 mg
Target:	INSM1
Protein Characteristics:	AA 1-521
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This INSM1 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

### Product Details

Sequence: MPRGFLVKRS KKSTPVSYRV RGGEDSDRAL LLSPGCGGAR AEPPVPSPGP LPPPPPPALA  
 ERAHAALAAA LACAPGPPPP PPPGPRAAHF GNPEAAHPAP LYSPTRPVSR EHEKHKYFER  
 SFNLGSPVSA ESFPTPAALL AGGGSGANGA GGGGGGTCGG DALLFAPAE L KMGTAFSAGA  
 EAARGPGTG PLSAAAALRP PGKRPAPPAA VATEPPAKAA KAPSAKKPKA IRKLHFEDEV  
 TTSPVLGLKI KEGPVEAPRG RAGGATRPLG EFICQLCKEE YADPFALAQH KCSRIVRVEY  
 RCPECAKVFS CPANLASHRR WHKPRVPVAA ARAPEPEAAT RAEAREAAGG GSSDRDTPSP  
 GGVSESGSED GLYECHHCAK KFRRQAYLRK HLLAHHQALQ AKGAPPPPPP PPPPAEDILA  
 FYAGPDEKAP QEASGDGEAA GVLGLSATAQ CHLCPVCGET FPSKGAQERH LRLHAAQVF  
 PCKYCPATFY SSPGLTRHIN KCHPSENQV ILLQVPVRPA C

**Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**

## Product Details

---

- Characteristics:
- Made in Germany - from design to production - by highly experienced protein experts.
  - Mouse Insm1 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
  - State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

- Purification:
- Two step purification of proteins expressed in baculovirus infected SF9 insect cells:
1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
  2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity: >95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility: 0.22 µm filtered

Endotoxin Level: Protein is endotoxin free.

Grade: Crystallography grade

## Target Details

Target:	INSM1
Alternative Name:	Insm1 ( <a href="#">INSM1 Products</a> )
Background:	<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. 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. {ECO:0000269 PubMed:16511571, ECO:0000269 PubMed:16951258, ECO:0000269 PubMed:18094025, ECO:0000269 PubMed:18940587, ECO:0000269 PubMed:24227653}.</p>
Molecular Weight:	55.0 kDa Including tag.
UniProt:	<a href="#">Q63ZV0</a>

## Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

## Handling

Format:	Liquid
---------	--------

## Handling

Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)

## Images



**Image 1.** „Crystallography Grade“ protein due to multi-step, protein-specific purification process