

Datasheet for ABIN7556866 **SNAIL Protein (SNAI1) (AA 1-264) (His tag)**



Overview

Quantity:	1 mg
Target:	SNAIL (SNAI1)
Protein Characteristics:	AA 1-264
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SNAIL protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat Snai1 Protein expressed in mammalien cells.
Sequence:	MPRSFLVRKP SDPRRKPNYS ELQDACVEFT FQQPYDQAHL LAAIPPPEVL NPAASLPTLI
	WDSLLVPQVR PVAWATLPLR ESPKAVELTS LSDEDSGKSS QPPSPPSPAP SSFSSTSASS
	LEAEAFIAFP GLGQLPKQLA RLSVAKDPQS RKIFNCKYCN KEYLSLGALK MHIRSHTLPC
	VCTTCGKAFS RPWLLQGHVR THTGEKPFSC SHCNRAFADR SNLRAHLQTH SDVKRYQCQA
	CARTFSRMSL LHKHQESGCS GGPR Sequence without tag. The proposed Purification-Tag is
	based on experiences with the expression system, a different complexity of the protein
	could make another tag necessary. In case you have a special request, please contact us.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.
	Protein expressed in mammalien cells and purified in one-step affinity chromatography
	The optimized expression system ensures reliability for intracellular, secreted and

transmembrane proteins.

· 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 try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

SNAIL (SNAI1)

Alternative Name:

Snai1 (SNAI1 Products)

Background:

Zinc finger protein SNAI1 (Protein snail homolog 1) (Protein sna), FUNCTION: Involved in induction of the epithelial to mesenchymal transition (EMT), formation and maintenance of embryonic mesoderm, growth arrest, survival and cell migration. Binds to 3 E-boxes of the Ecadherin gene promoter and to the promoters of CLDN7 and KRT8 and, in association with histone demethylase KDM1A which it recruits to the promoters, causes a decrease in dimethylated H3K4 levels and represses transcription. Involved in induction of the epithelial to mesenchymal transition (EMT), formation and maintenance of embryonic mesoderm, growth arrest, survival and cell migration. Binds to 3 E-boxes of the E-cadherin/CDH1 gene promoter and to the promoters of CLDN7 and KRT8 and, in association with histone demethylase KDM1A which it recruits to the promoters, causes a decrease in dimethylated H3K4 levels and represses transcription. The N-terminal SNAG domain 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' (in vitro) (By similarity). During EMT, involved with LOXL2 in negatively regulating pericentromeric heterochromatin transcription (PubMed:24239292). SNAI1 recruits LOXL2 to pericentromeric regions to oxidize histone H3 and repress transcription which leads to release of heterochromatin component CBX5/HP1A, enabling chromatin reorganization and acquisition of mesenchymal traits (PubMed:24239292).

Target Details

	Associates with EGR1 and SP1 to mediate 12-O-tetradecanoylphorbol-13-acetate (TPA)-induced up-regulation of CDKN2B, possibly by binding to the CDKN2B promoter region 5'-TCACA-3'. In addition, may also activate the CDKN2B promoter by itself.
	{ECO:0000250 UniProtKB:095863, ECO:0000269 PubMed:10655586,
	ECO:0000269 PubMed:11689706, ECO:0000269 PubMed:24239292}.
Molecular Weight:	29.2 kDa
UniProt:	Q02085
Pathways:	Negative Regulation of intrinsic apoptotic Signaling
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.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	The buffer composition 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:	12 months