

## Product datasheet

# Recombinant Human SNAIL protein ab134870

## 1 References

### Description

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<b>Product name</b>	Recombinant Human SNAIL protein
<b>Purity</b>	> 90 % SDS-PAGE. ab134870 was expressed in E. coli as inclusion bodies, refolded using a temperature shift inclusion body refolding technology and chromatographically purified.
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>O95863</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	MASMTGGQQMGRGHHHHHHGNLYFQGGEFPRSFLVRKP SDPNRKPNYSEL QDSNPEFTFQQPYDQAHLAAIPPPEILNPTASLPMLWDS VLAPQAQPI AWASLRLQESPRVAELTSLSEDESGKGSQPPSPSPAP SSFSSTSVSSLE AEAYAAFPGLGQVPKQLAQLSEAKDLQARKAFNCKYCNK EYLSLGALKMH IRSHTLPCVCGTCGKAFSRPWLLQGHVRTHTGEKPFSCP HCSRAFADRSN LRAHLQTHSDVKKYQCQACARTFSRMSLLHKHQESGCS GCPR
<b>Predicted molecular weight</b>	32 kDa including tags
<b>Amino acids</b>	2 to 264
<b>Tags</b>	His tag N-Terminus , T7 tag N-Terminus

### Specifications

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Our **Abpromise guarantee** covers the use of **ab134870** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE

**Form** Liquid

## Preparation and Storage

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### Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituent: 0.32% Tris HCl

Contains NaCl, EDTA, KCl, arginine, DTT and glycerol.

## General Info

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### 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 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. Associates with EGR1 and SP1 to mediate tetradecanoyl phorbol 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.

### Tissue specificity

Expressed in a variety of tissues with the highest expression in kidney. Expressed in mesenchymal and epithelial cell lines.

### Sequence similarities

Belongs to the snail C2H2-type zinc-finger protein family.

Contains 4 C2H2-type zinc fingers.

### Post-translational modifications

Phosphorylated by GSK3B. Once phosphorylated, it becomes a target for BTRC ubiquitination. Phosphorylation by CSNK1E, probably at Ser-104, provides the priming site for the subsequent phosphorylation by GSK3B, probably at Ser-100 and Ser-96. Phosphorylation by PAK1 may modulate its transcriptional activity by promoting increased accumulation in the nucleus. Phosphorylation at Ser-11 and Ser-92 positively regulates its functions in induction of EMT and cell survival, respectively. Phosphorylation by LATS2, upon mitotic stress, oncogenic stress or Hippo pathway activation, occurs in the nucleus and promotes nuclear retention and stabilization of total cellular protein level.

Ubiquitinated on Lys-98, Lys-137 and Lys-146 by FBXL14 and BTRC leading to degradation. BTRC-triggered ubiquitination requires previous GSK3B-mediated SNAI1 phosphorylation.

Ubiquitination induced upon interaction with NOTCH1 or TP53/p53 is mediated by MDM2.

O-GlcNAcylation at Ser-112 is enhanced in hyperglycaemic conditions, it opposes phosphorylation by GSK3B, and stabilizes the protein.

ADP-ribosylation by PARP1 increases protein half-life and may be involved in TGFB-induced SNAI1 up-regulation.

### Cellular localization

Nucleus. Cytoplasm. Once phosphorylated (probably on Ser-107, Ser-111, Ser-115 and Ser-119) it is exported from the nucleus to the cytoplasm where subsequent phosphorylation of the destruction motif and ubiquitination involving BTRC occurs.

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