

Product datasheet for TP503505

Snai1 (NM_011427) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse snail family zinc finger 1 (Snai1), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR203505 protein sequence Red =Cloning site Green =Tags(s) MPRSFLVRKPSDPRRKPNYSELQDACVEFTFQQPYDQAHLLAAIPPPEVLNPAASLPTLIWDSLLVPQVR PVAWATLPLRESPKAVELTSLDEDSGKSSQPPSPSPAPSSFSSTSASSLEAEAFIAPGLGQLPKQLA RLSVAKDPQSRKIFNCKYCNKEYLSLGALKMHIRSHTLPCVCTTCGKAFSRPWLLQGHVTRHTGEKPFSC SHCNRAFADRSNLRAHLQTHSDVKRYQCQACARTFSRMSLLHKHQESGCSGGPR SGPTRTRPLE QKLISEEDLA NDILDYKDDDDK V
Tag:	C-MYC/DDK
Predicted MW:	29.2 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_035557
Locus ID:	20613
UniProt ID:	Q02085
RefSeq Size:	1613


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Cytogenetics:	2 87.33 cM
RefSeq ORF:	792
Synonyms:	Sna; Sna1; Snail; Snail1
Summary:	<p>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 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). 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.[UniProtKB/Swiss-Prot Function]</p>