

Product datasheet for **TR314200**

CAPNS1 Human shRNA Plasmid Kit (Locus ID 826)

Product data:

Product Type:	shRNA Plasmids
Product Name:	CAPNS1 Human shRNA Plasmid Kit (Locus ID 826)
Locus ID:	826
Synonyms:	CALPAIN4; CANP; CANPS; CAPN4; CDPS; CSS1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	CAPNS1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 826). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001003962 , NM_001302632 , NM_001302633 , NM_001749 , NM_001003962.2 , NM_001749.1 , NM_001749.2 , NM_001749.3 , NM_001302633.1 , NM_001302632.1 , BC018931 , BC018931.2 , BC000592 , BC007779 , BC011903 , BC017308 , BC021933 , BC023643 , BC064998 , NM_001749.4 , NM_001003962.3 , NM_001302632.2 , NM_001302633.2
UniProt ID:	P04632
Summary:	This gene is a member of the calpain small subunit family. Calpains are calcium-dependent cysteine proteinases that are widely distributed in mammalian cells. Calpains operate as heterodimers, comprising a specific large catalytic subunit (calpain 1 subunit in Calpain I, and calpain 2 subunit in Calpain II), and a common small regulatory subunit encoded by this gene. This encoded protein is essential for the stability and function of both calpain heterodimers, whose proteolytic activities influence various cellular functions including apoptosis, proliferation, migration, adhesion, and autophagy. Calpains have been implicated in neurodegenerative processes, such as myotonic dystrophy. A pseudogene of this gene has been defined on chromosome 1. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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**Performance
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).