

Product datasheet for **TL309125**

SPTBN2 Human shRNA Plasmid Kit (Locus ID 6712)

Product data:

Product Type:	shRNA Plasmids
Product Name:	SPTBN2 Human shRNA Plasmid Kit (Locus ID 6712)
Locus ID:	6712
Synonyms:	GTRAP41; SCA5; SCAR14
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	SPTBN2 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 6712). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	NM_006946 , NM_006946.1 , NM_006946.2 , BC122522 , BC131819 , BC139788 , BC172438 , NM_006946.3
UniProt ID:	O15020
Summary:	Spectrins are principle components of a cell's membrane-cytoskeleton and are composed of two alpha and two beta spectrin subunits. The protein encoded by this gene (SPTBN2), is called spectrin beta non-erythrocytic 2 or beta-III spectrin. It is related to, but distinct from, the beta-II spectrin gene which is also known as spectrin beta non-erythrocytic 1 (SPTBN1). SPTBN2 regulates the glutamate signaling pathway by stabilizing the glutamate transporter EAAT4 at the surface of the plasma membrane. Mutations in this gene cause a form of spinocerebellar ataxia, SCA5, that is characterized by neurodegeneration, progressive locomotor incoordination, dysarthria, and uncoordinated eye movements. [provided by RefSeq, Dec 2009]
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).