

Product datasheet for **KN420929**

Spectrin beta chain, brain 3 (SPTBN4) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 linear donor
Donor DNA:	EF1a-GFP-P2A-Puro
Symbol:	Spectrin beta chain, brain 3
Locus ID:	57731



Components:

KN420929G1, Spectrin beta chain, brain 3 gRNA vector 1 in pCas-Guide CRISPR vector (GEI00002)

KN420929G2, Spectrin beta chain, brain 3 gRNA vector 2 in pCas-Guide CRISPR vector (GEI00002)

KN420929D, Linear donor DNA containing LoxP-EF1A-tGFP-P2A-Puro-LoxP:

The sequence below is cassette sequence only. The linear donor DNA also contains proprietary target sequence.

LoxP-EF1A-tGFP-P2A-Puro-LoxP (2739 bp)

ATAACTTCGT ATAATGTATG CTATACGAAG TTATCGTGAG GCTCCGGTGC CCGTCAGTGG GCAGAGCGCA CATCGCCCAC
AGTCCCGCAG AAGTTGGGGG GAGGGGTCGG CAATTGAACC GGTGCCTAGA GAAGGTGGCG CGGGGTAAC TGGGAAAGTG
ATGTCGTGTA CTGGCTCCGC CTTTTCCCG AGGGTGGGG AGAACCGTAT ATAAGTGCAG TAGTCGCCGT GAACGTTCTT
TTTCGCAACG GGTTCGCCG CAGAACACAG GTAAGTGCCG TGTGTGGTTC CCGCGGGCCT GGCCTCTTTA CGGGTTATGG
CCCTTGCGTG CCTTGAATTA CTTCCACCTG GCTGCAGTAC GTGATTCTTG ATCCCGAGCT TCGGGTTGGA AGTGGGTGGG
AGAGTTCGAG GCCTTGCGCT TAAGGAGCCC CTTGCGCTCG TGCTTGAGTT GAGGCTGGC CTGGGCGCTG GGGCCGCCG
GTGCGAATCT GGTGGCACCT TCGCGCCTGT CTCGCTGCTT TCGATAAGTC TCTAGCCATT TAAATTTTTT GATGACCTGC
TGCGACGCTT TTTTCTGGC AAGATAGTCT TGTAATGCG GGCCAAGATC TGCACACTGG TATTTCCGTT TTTGGGGCCG
CGGGCGGCGA CGGGGCCCGT GCGTCCCAGC GCACATGTTT GGCGAGGCGG GGCTGCGAG CGCGGCCACC GAGAATCGGA
CGGGGGTAGT CTAAGCTGG CCGGCTGCT CTGGTGCTG GCCTCGCGCC GCCGTGTATC GCGCCGCCCT GGGCGGCAAG
GCTGGCCCGG TCGGCACCAG TTGCGTGAGC GGAAGATGG CCGCTTCCCG GCCCTGCTGC AGGGAGCTCA AAATGGAGGA
CGCGGCGCTC GGGAGAGCGG GCGGGTGAGT CACCCACACA AAGGAAAAGG GCCTTTCCGT CCTCAGCCGT CGCTTCATGT
GACTCCACGG AGTACCGGGC GCCGTCCAGG CACCTCGATT AGTTCTCGAG CTTTTGGAGT ACCTGCTCTT TAGGTTGGGG
GGAGGGGTTT TATGCGATGG AGTTTCCCA CACTGAGTGG GTGGAGACTG AAGTTAGGCC AGCTTGACAT TTGATGTAAT
TCTCCTTGA ATTTGCCCTT TTTGAGTTG GATCTTGTT CATTCTAAG CCTCAGACAG TGGTTCAAAG TTTTTTCTT
CCATTTCAAG TGTCTGAAT GGAGAGCGAC GAGAGCGGCC TGCCCGCCAT GGAGATCGAG TGCCGCATCA CCGGACCCCT
GAACGCGCTG GAGTTCGAGC TGGTGGGCGG CGGAGAGGGC ACCCCGAGC AGGGCCGCAT GACCAACAAG ATGAAGAGCA
CCAAAGGCGC CTTGACCTTC AGCCCTACC TGCTGAGCCA CGTGATGGG TACGGCTTCT ACCACTTCGG CACTACCCC
AGCGGTACG AGAACCCTT CTTGCACGCC ATCAACAACG GCGGTACAC CAACACCCG ATCGAGAAGT ACGAGGACGG
CGGCGTGCTG CACGTGAGCT TCAGCTACCG CTACGAGGCC GGCCGCGTGA TCGGCGACTT CAAGGTGATG GGCACCGGCT
TCCCCGAGGA CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC ACCTGCACCC CATGGGCGAT
AACGATCTGG ATGGCAGCTT CACCCGCACC TTCAGCCTGC GCGACGGCG CTACTACAGC TCCGTGGTGG ACAGCCACAT
GCACTTCAAG AGCGCCATCC ACCCCAGCAT CTTGCAGAAC GGGGGCCCCA TGTTGCTCTT CCGCCGCGTG GAGGAGGATC
ACAGCAACAC CGAGCTGGG ATCGTGAGT ACCAGCACGC CTTCAGACC CCGATGCGAG ATGCCGGTGA AGAAAGAGGA
AGCGGAGCTA CTAACCTCAG CCTGCTGAAG CAGGCTGGAG ACGTGGAGGA GAACCCTGGA CCTATGACCG AGTACAAGCC
CACGGTGCGC CTCGCCACCC GCGACGAGT CCCCAGGGC GTACGCACCC TCGCCGCCG GTTCGCCGAC TACCCGCCA
CGCGCCACAC CGTCGATCCG GACCGCCACA TCGAGCGGT CACCGAGCTG CAAGAACTCT TCCTACGCG CGTCGGGCTC
GACATCGGCA AGGTGTGGT CGCGGACGAC GCGCGCGCG TGGCGGTCTG GACCAACGCC GAGAGCGTGG AAGCGGGGGC
GGTGTTCGCC GAGATCGGCC CGCGCATGGC CGAGTTGAGC GGTTCGCCG TGCCCGCGCA GCAACAGATG GAAGGCTTCC
TGGCGCCGCA CCGGCCAAG GAGCCGCGT GGTTCCTGCG CACCGTCGGC GTCTGCGCC ACCACAGGG CAAGGGTCTG
GGCAGCGCCG TCGTGCTCCC CGGAGTGGAG GCGGCCGAGC GCGCCGGGT GCCCGCTTC CTGGAGACCT CCGCGCCCCG
CAACCTCCCC TTCTACGAGC GGCTCGGCTT CACCGTCACC GCGGACGTC AGGTGCCGA AGGACCGCGC ACCTGGTGCA
TGACCCGCAA GCCCGGTGCC TGAACCTTGT TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATTC
ACAAATAAAG CATTTTTTTC ACTGCATTCT AGTTGTGGT TGTCCAACT CATCAATGTA TCTTAATAAC TTCGTATAAT
GTATGCTATA CGAAGTTAT



OTI Disclaimer:	These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.
RefSeq:	<u>NM_020971</u> , <u>NM_025213</u>
UniProt ID:	<u>Q9H254</u>
Synonyms:	QV; SPNB4; SPTBN3
Summary:	Spectrin is an actin crosslinking and molecular scaffold protein that links the plasma membrane to the actin cytoskeleton, and functions in the determination of cell shape, arrangement of transmembrane proteins, and organization of organelles. It is composed of two antiparallel dimers of alpha- and beta- subunits. This gene is one member of a family of beta-spectrin genes. The encoded protein localizes to the nuclear matrix, PML nuclear bodies, and cytoplasmic vesicles. A highly similar gene in the mouse is required for localization of specific membrane proteins in polarized regions of neurons. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:

