

## Product datasheet for **KN219649BN**

### SAP155 (SF3B1) Human Gene Knockout Kit (CRISPR)

#### Product data:

**Product Type:** Knockout Kits (CRISPR)  
**Format:** 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control  
**Donor DNA:** mBFP-Neo  
**Symbol:** SAP155  
**Locus ID:** 23451  
**Components:** **KN219649G1**, SAP155 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)  
**KN219649G2**, SAP155 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)  
**KN219649BND**, donor DNA containing left and right homologous arms and mBFP-Neo functional cassette.

Homologous arm and mBFP-Neo sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **mBFP-Neo in green**; **Right arm in violet**

```
AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCAATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCGGCG
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAACTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTT GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTCACCAGC GTTTCTGGGT GAGCAAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAACA AATAGGGGTT CCGCGCACAT TTCCCCGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCTTTTCGGG TCGCGCGTTT CGGTGATGAC
GGTGAAAACC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGCTT GTAAGCGGAT GCCGGGAGCA
GACAAGCCCG TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTAACTATG CGGCATCAGA
GCAGATTGTA CTGAGAGTGC ACCATAAAT TGTAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTITT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAATCA AAAGAATAGC
CCGAGATAGG GTTGAGTGTT GTTCCAGTTT GGAACAAGAG TCCACTATTA AAGAACGTGG ACTCCAACGT
CAAAGGGCGA AAAACCGTCT ATCAGGGCGA TGGCCACTA CGTGAACCAT CACCAAATC AAGTTTTTTG
GGTTCGAGGT GCCGTAAGC ACTAAATCGG AACCTAAG GGAGCCCCG ATTTAGAGT TGACGGGGAA
AGCCGGCGAA CGTGCGGAGA AAGGAAGGGA AGAAAGCGAA AGGAGCGGGC GCTAGGGCGC TGGCAAGTGT
AGCGGTACG CTGCGCGTAA CCACCACACC CGCCGCGCTT AATGCGCCG TACAGGGCGC GACTATGTT
TGCTTTGACG TATGCGGTGT GAAATACCGC ACAGATGCGT AAGGAGAAAA TACCGCATCA GGCGCCATTC
GCCATTACAG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCTCTT CGCTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGGTAACGC CAGGGTTTTT CCAGTCACGA CGTTGTAAAA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACAGG CTGTCGCCGT GCTCATTGTA
TAACTGCCG TTATTCATGC GACAGCCTGT AAAGACTGAG ACAGCTGCAA GGGAAAGTTT TCCTCGAGCT
CTTCCAGTGA ATTTTGGGAA AAGGGATTGA ATGTCTGAG TCTCTCCAG CTCTGAAACC GCAGCGTTTC
```



GTACAGTGT CATT TTTT TTTT TAATGGGAGG GGTCTCGGG TCTTGCTCTG TCGCCCGGTC TGGAGGCTTG  
 AGTACAGTGG CGCGACACGA TTACGGCTCA CGGCTGCCTC GAACCTCCTGG GCTCAAGCGA TGCTCCCGCC  
 TCAGCCTCCA GAGTTGCTGG GACTCAGTGT CTGTTCTTAA CTCCTTCGT AGAATCCACT TTCCTCCAGG  
 GCAAAGTTAC TACTTAAGG ACCTTACGGC TCGGCTCGGG GATTTCTGTTG GTCACCACGC AGGCGACTTC  
 AGGGCCCAAC CGTGTCTCCT CCCCCACCA CAATGCACCT CGCGTTCCC TCTAGGTGGC AGTTCTGTCA  
 CGTGTACCC GACGGAGCGC GCTCCCGTTT GCGCACCGC CAGAGTGCAG CCCCAGTA TTTTCTCCG  
 TGGCGCGGC GACGAGCGA AGTCTTGGG AGCGCCAGTT CCGTCTGTGT GTTCGAGTGA ACAAACACTAG  
 CATGAGCGAG CTGATTAAGG AGAACATGCA CATGAAGCTG TACATGGAGG GCACCGTGA CAACCATCAC  
 TTCAAGTGCA CATCCGAGGG CGAAGGCAAG CCCTACGAGG GCACCCAGAC CATGAGAATC AAGGTGGTCG  
 AGGGCGGCC TCTCCCTTC GCCTTCGACA TCCTGGCTAC TAGCTTCCTC TACGGCAGCA AGACCTTCAT  
 CAACCACACC CAGGGCATCC CCGACTTCTT CAAGCAGTCC TTCCCTGAGG GCTTCACATG GGAGAGAGTC  
 ACCACATACG AAGACGGGGG CGTGCTGACC GCTACCCAGG ACACCAGCT CCAGGACGC TGCTCATCT  
 ACAACGTCAA GATCAGAGGG GTGAAGTCA CATCCAACGG CCCTGTGATG CAGAAGAAA CACTCGGCTG  
 GGAGGCCCTC ACCGAGACGC TGTACCCCGC TGACGGCGC CTGGAAGGCA GAAACGACAT GGCCCTGAAG  
 CTCGTGGGCG GGAGCCATCT GATCGCAAC ATCAAGACCA CATATAGATC CAAGAAACCC GCTAAGAACC  
 TCAAGATGCC TGCGTCTAC TATGTGGACT ACAGACTGGA AAGAATCAAG GAGGCCAACA ACGAGACCTA  
 CGTCGAGCAG CACGAGGTGG CAGTGGCCAG ATACTGCGAC CTCCTAGCA AACTGGGCA CTAATCGAT  
 CATATTCAAT AACCTTAAT ATAACCTCGT ATAATGTATG CTATACGAAG TTATTAGGTC TGAAGAGGAG  
 TTTACGTCCA GCCAAGCTTA GGATCTCGAC CTCGAAATTC TACCGGTAG GGGAGGCGT TTTCCCAAGG  
 CAGTCTGGAG CATGCGCTT AGCAGCCCG CTGGGCACTT GGCGCTACAC AAGTGGCCTC TGGCCTCGCA  
 CACATTCCAC ATCCACCGT AGGCGCCAAC CGACTCCGT CTTTGGTGGC CCCTTCGCGC CACCTTCTAC  
 TCCTCCCCTA GTCAGGAAGT TCCCCCGC CCCGAGCTC GCGTCTGCA GGACGTGACA AATGGAAGTA  
 GCACGTCTCA CTAGTCTGT GCAGATGGAC AGCACCCTG AGCAATGGAA GCGGGTGGC CTTTGGGCA  
 GCGGCCAATA GCAGCTTTCG TCCTTCGCTT TCTGGGCTCA GAGGCTGGGA AGGGGTGGT CCGGGGCGG  
 GCTCAGGGG GGGCTCAGG GCGGGGCGG CGCCGAAGG TCCTCCGAG GCCCGCATT CTGCACGCTT  
 CAAAAGCGCA CGTCTGCCG GCTGTTCTC TCTTCTCAT CTCCGGGCT TTCGACCTG ATCCATCTAG  
 ATCTCGAGCA GCTGAAGCTT ACCATGATTG AACAAGATGG ATTGCACGCA GGTTCCTCGG CCGCTTGGGT  
 GGAGAGGCTA TTCGGCTATG ACTGGGCACA ACAGACAATC GGCTGCTCTG ATGCCCGCT GTTCCGGCTG  
 TCAGCGCAGG GCGCGCCGGT TCTTTTTGTC AAGACCGACC TGTCCGGTGC CCTGAATGAA CTGCAGGACG  
 AGGCAGCGC GCTATCGTGG CTGGCCACGA CGGGCGTTC TTGCGCAGCT GTGCTCGACG TTGTCAGTGA  
 AGCGGGAAG GACTGGCTGC TATTGGGCGA AGTGCCGGG CAGGATCTCC TGTATCTCA CCTTGCTCCT  
 GCCGAGAAAG TATCCATCAT GGCTGATGCA ATGCGGGCGC TGCATACGCT TGATCCGGCT ACCTGCCAT  
 TCGACCACA AGCGAAACAT CGCATCGAGC GAGCACGTAC TCGGATGGAA GCCGGTCTTG TCGATCAGGA  
 TGATCTGGAC GAAGAGCATC AGGGGCTCGC GCCAGCCGAA CTGTTCCGCA GGCTCAAGG CCGCATGCC  
 GACGGCGAGG ATCTCGTCTG GACCCATGGC GATGCCTGCT TGCCGAATAT CATGGTGGAA AATGGCCGCT  
 TTTCTGGATT CATCGACTGT GGGCGGCTGG GTGTGGCCGA CCGCTATCAG GACATAGCGT TGGCTACCCG  
 TGATATTGCT GAAGAGCTTG GCGGCGAATG GGCTGACCGC TTCCTCGTGC TTTACGGTAT CGCCGCTCCC  
 GATTGCGAGC GCATCGCCTT CTATCGCCTT CTGACGAGT TCTTCTGACG CCCGCCAC GACCCGACG  
 GCCGACCGA AAGGAGCGCA CGACCCATG CATCGATGAT ATCAGATCCC CGGGATGCAG AAATTGATGA  
 TCTATTAAC AATAAAGATG TCCAATAAAA TGGAAATTTT TCCTGTATA CTTTGTAAAG AAGGGTGAGA  
 ACAGAGTACC TACATTTTGA ATGGAAGGAT TGGAGTACG GGGGTGGGG TGGGTGGGA TTAGATAAAT  
 GCCTGCTCTT TACTGAAGG TCTTTACTAT TGCTTTATGA TAATGTTTCA TAGTTGGATA TCATAATTTA  
 AACAAAGAAA ACCAAATTA GGGCCAGCTC ATTCTCCCA CTCATGATCT ATAGATCTAT AGATCTCTCG  
 TGGGATCATT GTTTTTCTCT TGATTCCAC TTTGTGGTTC TAAGTACTGT GGTTCCAA TGTGTAGT  
 TCATAGCCTG AAGAACGAGA TCAGCAGCCT CTGTTCCACA TACACTTCAT TCTCAGTATT GTTTTGCCAA  
 GTTCTAATTC CATCAGAAGC TGGTCGAGAT CCGGAACCCT TAATATAACT TCGTATAATG TATGCTATAC  
 GAAGTTATTA GGTCCCTCGA AGAGGTTAC TAGGCGGCC AGCCTTTTTT CCTAGGATTC TGCCTTTTTT  
 TATGGTTTCT TTCGTAGGAG CTGAGCCCGC GTTTCGGGG CAAGGGTCTG CTCCTCCGCG CCAGCGGCGC  
 AGGCCACTGC CCCGCTAAT GCGTCTCTC TCTTACACC CCGACAGGCG CTTTGTTCAG TGTGGGAC  
 CTGCTACTTC AGAGTAGCTT CTCTTCTCTG ACCAGAGGGC CTCGTTTAAAG CGGCTTCCTC AGTAGGATTC  
 GTGGCAAGG GATCGGGGA GCGGGCGTGG GGAGAAGGTC TCACTCGCT CTCGACACTG TCGTCCCAT  
 AGTTTGTGCA GAAGAGGTC AGAAAAGCAC TGAATACGG CAGCCGCTT TCCGGCAGAC TGAATCGAAT

```

TTGGTAAAC CGAGATTCCG TTA CTCTACT CTTGTGTGT CTTCAAGCGT CAGTTACTTG TTTATTTTTT
TTGCACGAAA CGATTTGGGG ATAAAATCTG GTAGTTGTTT TCCCTCCCTT AGTCACTTTT AGTATAATAT
TGATCTTTTT CTTTGGAGAC TGGTTATTGG AGGAGCAGAT GGAAGAGGAA AACATAAATT ACTTTTCATTA
ATGGCCGAAG TCACTCTCGC CGGTTGGACT TTAGATCAGA AGGGATCTTG CTGCCGCCCG AAAGAGGAAG
GGCTGGAAGA GGAAGGAGCT TGGCGTAATC ATGGTCATAG CTGTTTCCTG TGTGAAATTG TTATCCGCTC
ACAATCCAC ACAACATACG AGCCGGAAGC ATAAAGTGTA AAGCCTGGGG TGCCTAATGA GTGAGCTAAC
TCACATTAAT TGC GTTGGCG TCACTGCCCG CTTTCCAGTC GGGAAACCTG TCGTGCCAGC TGCATTAATG
AATCGGCCAA CGCGCGGGGA GAGGCGGTTT GCGTATTGGG CGCTCTCCG CTTCTCGCT CACTGACTCG
CTGCGCTCGG TCGTTCGGCT GCGGCGAGCG GTATCAGCTC ACTCAAAGGC GGTAATACGG TTATCCACAG
AATCAGGGGA TAACGCAGGA AAGAACATGT GAGCAAAAGG CCAGCAAAAG GCCAGGAACG GTAAAAAGGC
CGCGTTGCTG GCGTTTTTCC ATAGGCTCCG CCCCCTGAC GAGCATCACA AAAATCGACG CTCAAGTCAG
AGGTGGCGAA ACCCGACAGG ACTATAAAGA TACCAGGCGT TTCCCCTGG AAGCTCCCTC GTGCGCTCTC
CTGTTCCGAC CCGCCGCTT ACCGGATACC TGTCGCTT TCTCCCTCG GGAAGCGTGG CGCTTCTCA
TAGCTCACGC TGAGGTATC TCAGTTCCGT GTAGGTCGTT CGCTCCAAGC TGGGCTGTGT GCACGAACCC
CCGTTCCAGC CCGACCGCTG CGCCTTATCC GGTAACATC GTCTTGAGTC CAACCCGGTA AGACACGACT
TATCGCCACT GGCAGCAGCC ACTGGTAACA GGATTAGCAG AGCGAGGTAT GTAGGCGGTG CTACAGAGTT
CTTGAAGTGG TGGCCTAACT ACGGCTACAC TAGAAGAACA GTATTTGGTA TCTGCGCTCT GCTGAAGCCA
GTTACCTTCG GAAAAAGAGT TGGTAGCTCT TGATCCGGCA AACAAACCAC CGCTGGTAGC GGTGGTTTTT
TTGTTTGCAA GCAGCAGATT ACGCGCAGAA AAAAAGGATC TCAAGAAGAT CCTTTGATCT TTTCTACGGG
GTCTGACGCT CAGTGAACG AAAACTCAG TTAAGGGATT TTGGTCATGA GATTATCAA AAGGATCTTC
ACCTAGATCC TTTTAAATTA AAAATGAAGT TTTAAATCAA TCTAAAGTAT ATATGAGTAA ACTTGGTCTG
ACAGTTACCA ATGCTTAATC AGTGAGGCAC CTATCTCAGC GATCTGTCTA TTTCTGTCAT CCATAGTTGC
CTGATCCCC GTCGTGTAGA TAACTACGAT ACGGGAGGGC TTACCATCTG GCCCCAGTGC TGCAATGATA
CCGCGAGAAC CACGCTCACC GGCTCCAGAT TTATCAGCAA TAAACCAGCC AGCCGGAAGG GCCGAGCGCA
GAAGTGGTCC TGCAACTTTA TCCGCTCCA TCCAGTCTAT TAATTGTTGC CGGGAAGCTA GAGTAAGTAG
TTCGCCAGTT AATAGTTTGC GCAACGTTGT TGCCATTGCT ACAGGCATCG TGGTGTACAG CTCGTCGTTT
GGTATGGCTT CATTAGCTC CGGTTCCCAA CGATC

```

**GE100003**, scramble sequence in pCas-Guide vector

**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:**

[NM\\_001005526](#), [NM\\_001308824](#), [NM\\_012433](#)

**UniProt ID:**

[O75533](#)

**Synonyms:**

Hsh155; MDS; PRP10; PRPF10; SAP155; SF3b155

**Summary:**

This gene encodes subunit 1 of the splicing factor 3b protein complex. Splicing factor 3b, together with splicing factor 3a and a 12S RNA unit, forms the U2 small nuclear ribonucleoproteins complex (U2 snRNP). The splicing factor 3b/3a complex binds pre-mRNA upstream of the intron's branch site in a sequence independent manner and may anchor the U2 snRNP to the pre-mRNA. Splicing factor 3b is also a component of the minor U12-type spliceosome. The carboxy-terminal two-thirds of subunit 1 have 22 non-identical, tandem HEAT repeats that form rod-like, helical structures. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

## Product images:

