

## Product datasheet for **KN308537**

### Jag1 Mouse Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	Jag1
Locus ID:	16449
Components:	<p><b>KN308537G1</b>, Jag1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGGCCGGCCGCGCTCCGT</p> <p><b>KN308537G2</b>, Jag1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GACTCCTACCTTGGCTCGCA</p> <p><b>KN308537D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

```
GGTGTCTGGGG CGCAGCCATG ACCCAGTCAC GTAGCGATAG CGGAGTGTAT ACTGGCTTAA CTATGCGGCA
TCAGAGCAGA TTGTAAGTGG AGTGCACCAT ATGCGGTGTG AAATACCGCA CAGATGCGTA AGGAGAAAAT
ACCGCATCAG GCGCTCTTCC GCTTCCTCGC TCACTGACTC GCTGCGCTCG GTCGTTCCGC TCGCGCGAGC
GGTATCAGCT CACTCAAAGG CGGTAATACG GTTATCCACA GAATCAGGGG ATAACGCAGG AAAGAACATG
TGAGCAAAAG GCCAGCAAAA GGCCAGGAAC CGTAAAAAGG CCGCGTTGCT GCGCTTTTTC CATAGGCTCC
GCCCCCTGA CGAGCATCAC AAAAAATCGAC GCTCAAGTCA GAGGTGGCGA AACCCGACAG GACTATAAAG
ATACCAGGCG TTTCCCTCTG GAAGCTCCCT CGTGCCTCTT CCTGTTCCGA CCCTGCCGCT TACCGGATAC
CTGTCCGCTT TTCTCCCTTC GGGGAAGCGTG GCGCTTTCTC ATAGCTCAGC CTGTAGGTAT CTCAGTTCGG
TGTAGGTCGT TCGCTCCAAG CTGGGCTGTG TGCACGAACC CCCCCTTCAG CCCGACCGCT GCGCCTTATC
CGGTAAGTAT CGTCTTGAGT CCAACCCGGT AAGACACGAC TTATCGCCAC TGGCAGCAGC CACTGGTAAC
AGGATTAGCA GAGCGAGGTA TGTAGGCGGT GCTACAGAGT TCTTGAAGTG GTGGCCTAAC TACGGCTACA
CTAGAAGGAC AGTATTTGGT ATCTGCGCTC TGCTGAAGCC AGTTACCTTC GAAAAAAGAG TTGGTAGCTC
TTGATCCGCG AAACAAACCA CCGCTGGTAG CGGTGGTTTT TTTGTTTGA AGCAGCAGAT TACGCGCAGA
AAAAAAGGAT CTCAAGAAGA TCCTTTGATC TTTTCTACGG GGTCTGACGC TCAGTGGAAC GAAAACCTCAC
GTTAAGGGAT TTTGGTCAAT AGATTATCAA AAAGGATCTT CACCTAGATC CTTTTAAATT AAAAATGAAG
TTTTAAATCA ATCTAAAGTA TATATGAGTA AACTTGGTCT GACAGTTACC AATGCTTAAT CAGTGAGGCA
CCTATCTCAG CGATCTGTCT ATTTCTGTTA TCCATAGTTG CCTGACTCCC CGTCGTGTAG ATAACTACGA
TACGGGAGGG CTTACCATCT GGCCCCAGTG CTGCAATGAT ACCGCGAGAC CCACGCTCAC CGGCTCCAGA
TTTATCAGCA ATAAACCAGC CAGCCGGAAG GGCCGAGCGC AGAAGTGGTC CTGCAACTTT ATCCGCTCC
ATCCAGTCTA TTAATTGTTG CCGGGAAGCT AGAGTAAGTA GTTCGCCAGT TAATAGTTTG CGCAACGTTG
TTGCCATTGC TGCAGGCATC GTGGTGTAC GCTCGCTGTT TGGTATGGCT TCATTTCAGT CCGGTTCCCA
ACGATCAAGG CGAGTTACAT GATCCCCAT GTTGTGCAAA AAAGCGTTA GCTCCTTCGG TCTCCGATC
GTTGTCAGAA GTAAGTTGGC CGCAGTGTTA TCACTCATGG TTATGGCAGC ACTGCATAAT TCTCTTACTG
```



[View online »](#)

TCATGCCATC CGTAAGATGC TTTTCTGTGA CTGGTGAGTA CTCAACCAAG TCATTCTGAG AATAGTGTAT  
 GCGGCGACCG AGTTGCTCTT GCCCGGCGTC AACACGGGAT AATACCGCGC CACATAGCAG AACTTTAAAA  
 GTGCTCATCA TTGGAAAACG TTCTTCGGGG CGAAAACCTT CAAGGATCTT ACCGCTGTTG AGATCCAGTT  
 CGATGTAACC CACTCGTGCA CCCAACTGAT CTTCAGCATC TTTTACTTTC ACCAGCGTTT CTGGGTGAGC  
 AAAAACAGGA AGGCAAAATG CCGCAAAAAA GGAATAAAGG GCGACACGGA AATGTTGAAT ACTCATACTC  
 TTCCTTTTTT AATATTATTG AAGCATTTAT CAGGGTTATT **CCCTCCCCA** **ACAACCCGA** **GGAAAGGGC**  
**GTGCCAATA** **GATGGCACG** **CCCTATGAA** **TATTAACAAT** **CGCGCATGC** **CCTTGTTCCG** **CGTGTGAGA**  
**AGAGGTGGC** **AGCCGGAGT** **CCGGCTCCA** **GACCGGCGT** **CCGGGTCCT** **TCGAGAGCCA** **GGCGGGCAG**  
**CGTCATTGT** **TTACCTGCAG** **CCGGCCGGC** **AGCTAGGCT** **AGGTTTTTTT** **TTTTTTTTTC** **CTCCCCCTCC**  
**TCCCCCGTT** **TCATGCAGT** **GATCTGAAAG** **GGAATAAAG** **GCTGCGCATA** **ATCATAATA** **TAAAAGAAG**  
**GGAGCGCAG** **AGAAGGAAAG** **AAAGCCGAGA** **GGTGGAAGAG** **GGGGGAGCG** **CTCAAAGAAG** **CGATCAGAAT**  
**AATAAAAGGA** **GGCCGGGCT** **TTTGCCTTCT** **GGAACGCGC** **GCTCTTGAAA** **GGGCTTTTGA** **AAAGTAGTGT**  
**TGTTTTCCAG** **TCGTGCATG** **TCCAATCCAC** **GGAGTATATT** **AGAGCCGGA** **CGCGGCGCC** **CGCGGGCAG**  
**CGACGACGC** **AGCTCGGCG** **GGAGCACCAG** **CGCTAGCAGC** **GGCGGCGCG** **TCCGAGTGC** **CCGTGGCAG**  
**CGCGCAGCG** **ACTAGCATG** **AGAGCGACG** **GAGCGGCTG** **CCCGCCATG** **AGATCGAGT** **CCGCATCACC**  
**GGACCCCTGA** **ACGGCGTGA** **GTTTCGAGCT** **GTGGGCGCG** **GAGAGGGCAC** **CCCCGAGCAG** **GGCCGCATGA**  
**CCAACAAGAT** **GAAGAGCACC** **AAAGGCGCCC** **TGACCTTCAG** **CCCCTACCTG** **CTGAGCCACG** **TGATGGGCTA**  
**CGGCTTCTAC** **CACTTCGGCA** **CCTACCCAG** **CGGCTACGAG** **AACCCCTTCC** **TGCACGCCAT** **CAACAACGGC**  
**GGTACACCA** **ACACCCGCAT** **CGAGAAGTAC** **GAGGACGGCG** **GCGTGCTGCA** **CGTGAGCTTC** **AGTACCGCT**  
**ACGAGGCCGG** **CCGCGTGATC** **GGCGACTTCA** **AGGTGATGGG** **CACCGGCTTC** **CCCGAGGACA** **GCGTGATCTT**  
**CACCGACAAG** **ATCATCCGCA** **GCAACGCCAC** **CGTGGAGCAC** **CTGCACCCA** **TGGGCGATAA** **CGATCTGGAT**  
**GGCAGCTTCA** **CCCGCACCTT** **CAGCCTGCGC** **GACGGCGGCT** **ACTACAGCTC** **CGTGGTGGAC** **AGCCACATGC**  
**ACTTCAAGAG** **CGCCATCCAC** **CCCAGCATCC** **TGCAGAACGG** **GGGCCCCATG** **TTCCGCTTCC** **GCCCGTGGGA**  
**GGAGGATCAC** **AGCAACACCG** **AGCTGGGCAT** **CGTGGAGTAC** **CAGCACGCCT** **TCAAGACCCC** **GGATGCAGAT**  
**GCCGGTGAAG** **AAAGAGTTTA** **AGAATTCCGA** **TCATATTCAA** **TAACCCTTAA** **TATAACTTCG** **TATAATGTAT**  
**GCTATACGAA** **GTTATTAGGT** **CTGAAGAGGA** **GTTTACGTCC** **AGCCAAGCTT** **AGGATCTCGA** **CCTCGAAATT**  
**CTACCGGGTA** **GGGGAGGCG** **TTTTCCAAG** **GCAGTCTGGA** **GCATGCGCTT** **TAGCAGCCC** **GCTGGGCACT**  
**TGGCGCTACA** **CAAGTGGCCT** **CTGGCCTCGC** **ACACATTCCA** **CATCCACCGG** **TAGGCGCAA** **CCGACTCCGT**  
**TCTTTGGTGG** **CCCCTTCGCG** **CCACCTTCTA** **CTCCTCCCCT** **AGTCAGGAAG** **TTCCCCCCCG** **CCCCGAGCT**  
**CGGTCGTGC** **AGGACGTGAC** **AAATGGAAGT** **AGCACGTCTC** **ACTAGTCTCG** **TGCAGATGGA** **CAGCACCGCT**  
**GAGCAATGGA** **AGCGGGTAGG** **CCTTTGGGGC** **AGCGGCCAAT** **AGCAGCTTTG** **CTCCTTCGCT** **TTCTGGGCTC**  
**AGAGGCTGGG** **AAGGGGTGGG** **TCCGGGGCGG** **GGCTCAGGGG** **CGGGCTCAGG** **GGCGGGGCGG** **GCGCCCGAAG**  
**GTCTCCGGGA** **GGCCCGGCAT** **TCTGCACGCT** **TCAAAAGCGC** **ACGTCTGCCG** **CGCTGTCTC** **CTCTTCTCA**  
**TCTCCGGGCC** **TTTCGACCTG** **CATCCATCTA** **GATCTCGAGC** **AGCTGAAGCT** **TACCATGACC** **GAGTACAAGC**  
**CCACGGTGCG** **CCTCGCCACC** **CGCGACGACG** **TCCCCAGGGC** **CGTACGCACC** **CTCGCCGCCG** **CGTTCCGCCA**  
**CTACCCGCC** **ACGCGCCACA** **CCGTCGATCC** **GGACCGCCAC** **ATCGAGCGGG** **TCACCGAGCT** **GCAAGAATC**  
**TTCTCACGC** **GCGTCGGGCT** **CGACATCGGC** **AAGGTGTGGG** **TCGCGGACGA** **CGGCGCCCGG** **GTGGCGGTCT**  
**GGACCACGCC** **GGAGAGCGTC** **GAAGCGGGGG** **CGGTGTTTCG** **CGAGATCGGC** **CCGCGCATGG** **CCGAGTTGAG**  
**CGGTTCCCGG** **CTGGCCGCGC** **AGCAACAGAT** **GGAAGGCCTC** **CTGGCGCCGC** **ACCGGCCCAA** **GGAGCCCGCG**  
**TGGTTCCTGG** **CCACCGTCGG** **CGTCTCGCCC** **GACCACCAGG** **GCAAGGGTCT** **GGGCAGCGCC** **GTCGTGCTCC**  
**CCGGAGTGGA** **GGCGCCGAG** **CGCGCCGGGG** **TGCCCGCCTT** **CCTGGAGACC** **TCCGCGCCCC** **ACAACCTCCC**  
**CTTCTACGAG** **CGGCTCGGCT** **TCACCGTCAC** **CGCCGACGTC** **GAGGTGCCCG** **AAGGACCGCG** **CACCTGGTGC**  
**ATGACCCGCA** **AGCCCGGTGC** **CTGACGCCCG** **CCCCACGACC** **CGCAGCGCCC** **GACCGAAAGG** **AGCGCACGAC**  
**CCCATGCATC** **GATGATATCA** **GATCCCCGGG** **ATGCAGAAAT** **TGATGATCTA** **TTAAACAATA** **AAGATGTCCA**  
**CTAAAATGGA** **AGTTTTTCTT** **GTCATACTTT** **GTTAAGAAGG** **GTGAGAACAG** **AGTACCTACA** **TTTTGAATGG**  
**AAGGATTGGA** **GCTACGGGGG** **TGGGGTGGG** **GTGGGATTAG** **ATAAATGCCT** **GCTCTTACT** **GAAGGCTCTT**  
**TACTATTGCT** **TTATGATAAT** **GTTTCATAGT** **TGGATATCAT** **AATTTAAACA** **AGCAAAACCA** **AATTAAGGGC**  
**CAGCTCATT** **CTCCACTCA** **TGATCTATAG** **ATCTATAGAT** **CTCTCGTGGG** **ATCATTGTTT** **TTCTTTGAT**  
**TCCCACTTTG** **TGGTTCTAAG** **TACTGTGGTT** **TCCAAATGTG** **TCAGTTTCAT** **AGCCTGAAGA** **ACGAGATCAG**  
**CAGCCTCTGT** **TCCACATACA** **CTTCATTCTC** **AGTATTGTTT** **TGCCAAGTTC** **TAATTCCATC** **AGAAGCTGGT**  
**CGAGATCCGG** **AACCCTTAAT** **ATAACTTCGT** **ATAATGTATG** **CTATACGAAG** **TTATTAGGTC** **CCTCGAAGAG**  
**GTTCACTAGG** **CGCGCCGACG** **GGAGCGGCTG** **TGGTCCAG** **TGCAAGTTC** **GGAGCCCTTG** **AGTACAAGG**

```

TCCTGACCC TGA CTTTCA CCCGAGAGGC AGCACCCGGT GAGGGAACGC TGGTTCCCCA GAGGGGAGCC
CCTGGCCTCG AAAGATAAAC TCCTCCAGGC TGGGCAAAT GCGATCATTG CGTTCTCACG GTCCTTCGGG
GCACTTGTCT TAGTTTTCCC GCACTTGTGT TTTTATGCC CCCAAACCAG GTTGAGCCCT AACCTAGTT
TTTGCAAAT TATTTTCACT TGCCACCAG GATCTTTGGC AGCCTGGGGT GTGTGTATTG GGGTGGGGG
GTGTCAAGGA GTCTCCACCT CCACCTCAG AGAAAACCTT CTCATGCGTT GACCTTCCTT CCTCGCTGGC
AGGTGTGCGG GGCCTCGGGT CAGTTTGAGC TGGAGATCCT GTCCATGCAG AACGTGAATG GAGAGCTACA
GAATGGGAAC TGTGTGGTG GAGTCCGGAA CCCTGGCGAC CGCAAGTGCA CCCGCGACGA GTGTGATACG
TACTTCAAAG TGTGCCTCAA GGAGTATCAG TCCCGCGTCA CTGCCGGGGG ACTCACTCTC GCCGGTTGGA
CTTTAGATCA GAAGGGATCT TGCTGCCGCC CGAAAGAGGA AGGGCTGGAA GAGGAAGGAG CTTTAATGCG
GTAGTTTATC ACAGTTAAAT TGCTAACGCA GTCAGGCACC GTGTATGAAA TCTAACAAATG CGCTCATCGT
CATCTCAGGC ACCGTCACCC TGGATGCTGT AGGCATAGGC TTGGTTATGC CGGTAAGTCC GGGCCTCTTG
CGGGATATCG TCCATTCCGA CAGCATCGCC AGTCACTATG GCGTGTGCT AGCGCTATAT GCGTTGATGC
AATTTCTATG CGCACCCGTT CTCGGAGCAC TGTCCGACCG CTTTGGCCGC CGCCAGTCC TGCTCGCTTC
GCTACTTGA GCACTATCG ACTACGCGAT CATGGCGACC ACACCCGTC TGTGGATCCT CTACGCCGGA
CGCATCGTGG CCGGCATCAC CGGCGCCACA GGTGCGGTTG CTGGCGCCTA TATCGCCGAC ATCACCAGT
GGGAAGATCG GGCTCGCCAC TTCGGGCTCA TGAGCGCTTG TTTCCGGGTG GGTATGGTGG CAGGCCCGT
GGCCGGGGGA CTGTTGGGCG CCATCTCCTT GCATGCACCA TTCCTTGGCG CGGCGGTGCT CAACGGCCTC
AACCTACTAC TGGGCTGCTT CCTAATGCAG GAGTCGCATA AGGGAGAGCG TCGACCGATG CCCTTGAGAG
CCTTCAACCC AGTCAGCTCC TTCCGGTGGG CGCGGGGCAT GACTATCGTC GCCGCACTTA TGACTGTCTT
CTTTATCATG CAACTCGTAG GACAGGTGCC GGCAGCGCTC TGGGTCATTT TCGGCGAGGA CCGCTTTCG
TGGAGCGCGA CGATGATCGG CCTGTGCTT GCGGTATTG GAATCTTGCA CGCCCTCGT CAAGCCTTCG
TCACTGGTCC CGCCACCAA CGTTTCGGCG AGAAGCAGGC CATTATCGCC GGCATGGCGG CCGACGCGT
GGGCTACGTC TTGCTGGCGT TCGCGACGCG AGGCTGGATG GCCTTCCCCA TTATGATTCT TCTCGTTCC
GGCGGCATCG GGATGCCCGC GTTGCAGGCC ATGCTGTCCA GGCAGGTAGA TGACGACCAT CAGGGACAGC
TTCAAGGATC GCTCGCGGCT CTTACCAGCC TAACTTCGAT CACTGGACCG CTGATCGTCA CGGCGATTTA
TGCCGCTCG GCGAGCACAT GGAACGGGTT GGCATGGATT GTAGGCGCG CCCTATACTT TGTCTGCCTC
CCCCTGTTG GTCGCGGTGC ATGGAGCCGG GCCACCTCGA CCTGAATGGA AGCCGCGCG ACCTCGCTAA
CGGATTCACC ACTCCAAGAA TTGGAGCAA TCAATTCTG CGGAGAAGT TGAATGCGCA AACCAACCTT
TGGCAGAACA TATCCATCG GTCGCGCATC TCCAGCAGC GCACGCGCG CATCTCGGG AGCGTTGGGT
CCTGGCCACG GGTGCGCATG ATCGTGTCC TGTGTTGAG GACCCGCTA GGCTGGCGG GTTGCCTTAC
TGGTTAGCAG AATGAATCAC CGATACGCGA GCGAACGTGA AGCGACTGCT GCTGCAAAC GTCTGCGACC
TGAGCAACAA CATGAATGGT CTTGCGTTTC CGTGTTCGT AAAGTCTGGA AACGCGAAG TCAGCGCCTT
GCACCATTAT GTTCCGGATC TGATCGCAG GATGCTGCTG GCTACCCTGT GGAACACCTA CATCTGTATT
AACGAAGCGC TGGCATTGAC CCTGAGTGAT TTTTCTCTGG TCCCGCCGCA TCCATACCGC CAGTTGTTTA
CCCTCACAA GTTCCAGTAA CCGGGCATGT TCATCATCAG TAACCCGTAT CGTGAGCATC CTCTCTCGTT
TCATCGGTAT CATTACCCCT ATGAACAGAA ATCCCTTCA CACGGAGGCA TCAGTGACCA AACAGGAAAA
AACCGCCCTT AACATGGCCC GC

```

**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\\_013822](#)

**UniProt ID:**

[Q9QXX0](#)

**Synonyms:**

ABE2; Gsfabe2; Htu; Ozz; Ser-1

**Summary:**

Ligand for multiple Notch receptors and involved in the mediation of Notch signaling. May be involved in cell-fate decisions during hematopoiesis. Seems to be involved in early and late stages of mammalian cardiovascular development. Inhibits myoblast differentiation (By similarity). May regulate fibroblast growth factor-induced angiogenesis.[UniProtKB/Swiss-Prot Function]

**Product images:**

