

Product datasheet for **KN210516**

Jagged1 (JAG1) Human 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: | Jagged1 |
| Locus ID: | 182 |
| Components: | <p>KN210516G1, Jagged1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTTCCCCACGGACGCGCGGC</p> <p>KN210516G2, Jagged1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGCTTAGGGGGCGCCCGGAC</p> <p>KN210516D, 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**

```

AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCGGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTG GTTGAGATCC AGTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAACA AATAGGGGTT CCGCGCAT TCCCCGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGGTTT CGGTGATGAC
GGTAAAACC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGCT GTAAGCGGAT GCCGGGAGCA
GACAAGCCCG TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTTAACTATG CGGCATCAGA
GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTTTT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAATCA AAAGAATAGC
CCGAGATAGG GTTGAGTGTT GTTCCAGTTT GGAACAAGAG TCCACTATTA AAGAACGTGG ACTCCAACGT
CAAAGGGCGA AAAACCGTCT ATCAGGGCGA TGGCCCACTA CGTGAACCAT CACCAAATC AAGTTTTTTG
GGGTCGAGGT GCCGTAAAGC ACTAAATCGG AACCCCTAAG GGAGCCCCCG ATTTAGAGCT TGACGGGGAA
AGCCGGCGAA CGTGCGGAGA AAGGAAGGGA AGAAAGCGAA AGGAGCGGGC GCTAGGGCGC TGGCAAGTGT
AGCGGTACAG CTGCGGTAA CCACCACACC CGCCGCGCTT AATGCGCCGC TACAGGGCGC GACTATGGT
TGCTTTGACG TATGCGGTGT GAAATACCGC ACAGATCGCT AAGGAGAAAA TACCGCATCA GGCGCCATC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCTCTT CGTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GGAAGACACA

```



[View online »](#)

CCTACCCCT CCCAGCAAC GTGAAGGGGA GGGCGTGCC CAGGGTGAGC ACGCCCTCTC ATGAATATTA
 ATAAGCGCG ATGCGCCCTG CCCGGCGTGC TGGGTAGAGG TGGCCAGCCC CGGCCGCTGC TGCCAGACGG
 GCTCTCCGG TCCTTCTCCG AGAGCCGGGC GGGCACGCGT CATTGTGTTA CCTGCGGCCG GCCCGCGAGC
 TAGGCTGGTT TTTTTTTTTC TCCCCTCCT CCCCCCTTTT TCCATGCAGC TGATCTAAAA GGAATAAAAA
 GGCTGCGCAT AATCATAATA ATAAAAGAAG GGGAGCGCGA GAGAAGGAAA GAAAGCCGGG AGGTGGAAGA
 GGAGGGGGAG CGTCTCAAAG AAGCGATCAG AATAATAAAA GGAGGCCGGG CTCTTTGCT TCTGGAACGG
 GCCGCTCTTG AAAGGGCTTT TGAAAAGTGG TGTGTTTTTC CAGTCGTGCA TGCTCCAATC GGCGGAGTAT
 ATTAGAGCCG GGACGCGGCG GCCGCAGGGG CAGCGGGGAC GGCAGCACCG GCGGCAGCAC CAGCGCGAAC
 AGCAGCGGCG GCGTCCCGAG TGCCCGCGGC GCGCGGCGCA GCGACTAGCA TGGAGAGCGA CGAGAGCGGC
 CTGCCCGCCA TGGAGATCGA GTGCCGCATC ACCGGCACCC TGAACGGCGT GGAGTTCGAG CTGGTGGGCG
 GCGGAGAGGG CACCCCGAG CAGGGCCGCA TGACCAACA GATGAAGAGC ACCAAAGGCG CCCTGACCTT
 CAGCCCTAC CTGCTGAGCC ACGTGATGG CTACGGCTTC TACCACTTCG GCACCTACCC CAGCGGCTAC
 GAGAACCCCT TCCTGCACGC CATCAACAAC GCGGCTACA CCAACACCCG CATCGAGAAG TACGAGGACG
 GCGGCGTGCT GCACGTGAGC TTCAGCTACC GCTACGAGGC CGGCCGCGTG ATCGGCGACT TCAAGGTGAT
 GGGCACCGGC TTCCCGAGG ACAGCGTGAT CTTACCCGAC AAGATCATCC GCAGCAACGC CACCGTGGAG
 CACCTGCACC CCATGGGCGA TAACGATCTG GATGGCAGCT TCACCCGCAC CTTCAGCCTG CGCGACGGCG
 GCTACTACAG CTCCGTGGTG GACAGCCACA TGCACTTCAA GAGCGCCATC CACCCAGCA TCCTGCAGAA
 CGGGGGCCCC ATGTTCCGCT TCCGCCGCGT GGAGGAGGAT CACAGCAACA CCGAGCTGGG CATCGTGGAG
 TACCAGCACG CCTTCAAGAC CCCGGATGCA GATGCCGGTG AAGAAAGAGT TTAAGAATTC CGATCATATT
 CAATAACCT TAATATACT TCGTATAATG TATGCTATAC GAAGTTATTA GGTCTGAAGA GGAGTTTACG
 TCCAGCCAAG CTTAGGATCT CGACCTCGAA ATTCTACCGG GTAGGGGAGG CGTTTTTCCC AAGGCAGTCT
 GGAGCATCGC CTTTAGCAGC CCCGTGGGC ACTTGGCGCT ACACAAGTGG CCTCTGGCCT CGCACACATT
 CCACATCCAC CGGTAGGCGC CAACCGACTC CGTTCTTTGG TGGCCCTTC GCGCCACCTT CTACTCTCC
 CCTAGTCAGG AAGTTCCTCC CGGCCCGCA GCTCGCTCG TGCAGGACGT GACAAAATGGA AGTAGCACGT
 CTACTAGTC TCGTGCAGAT GGACAGCAC GCTGAGCAAT GGAAGCGGGT AGGCCTTTGG GGCAGCGGCC
 AATAGCAGCT TTGCTCCTC GCTTCTGGG CTCAGAGGCT GGAAGGGGT GGGTCCGGGG GCGGGCTCAG
 GGGCGGGCTC AGGGGCGGGG CGGGCGCCG AAGGTCTCC GGAGGCCCGG CATTCTGCAC GCTTCAAAAG
 CGCACGTCTG CCGCGCTGTT CTCCTCTCC TCATCTCCGG GCCTTTCGAC CTGCATCCAT CTAGATCTCG
 AGCAGCTGAA GCTTACCATG ACCGAGTACA AGCCACGGT GCGCCTCGCC ACCCGCAGC ACGTCCCAG
 GGGCTACGC ACCCTCGCG CCGGTTCCG CACTACCC GCCACGCGCC ACACCGTGA TCCGGACCGC
 CACATCGAGC GGGTCACCGA GCTGCAAGAA CTCTTCTCA CGCGCTCGG GCTCGACATC GGCAAGGTGT
 GGGTCGCGGA CGACGGCGCC GCGGTGGCG TCTGACCAC GCCGGAGAGC GTCGAAGCGG GGGCGGTGTT
 CGCCGAGATC GGCCCGCGCA TGGCCGAGTT GAGCGGTTCC CGGCTGGCCG CGCAGCAACA GATGGAAGGC
 CTCTGGCGC CGCACGGGCC CAAGGAGCCC GCGTGGTTCC TGGCCACCGT CGGCGTCTCG CCCGACCACC
 AGGGCAAGGG TCTGGGCAGC GCCGTCGTGC TCCCGGAGT GGAGGCCGCC GAGCGCGCCG GGGTCCCCGC
 CTTCTGGAG ACCTCCGCGC CCCACAACCT CCCCTTCTAC GAGCGGCTCG GCTTACCGT CACCGCCGAC
 GTCGAGGTGC CCGAAGGACC GCGCACCTGG TGCATGACCC GCAAGCCCGG TGCTGACGC CCGCCCCAG
 ACCCGCAGC CCCGACCGAA AGGAGCGCAC GACCCCATGC ATCGATGATA TCAGATCCCC GGGATCGAGA
 AATTGATGAT CTATTAACA ATAAAGATGT CCACTAAAA GGAAGTTTTT CCTGTCATC TTTGTTAAGA
 AGGGTGAGAA CAGAGTACCT ACATTTTGAA TGAAGGATT GGAGCTACGG GGGTGGGGT GGGGTGGGAT
 TAGATAAATG CCTGCTCTT ACTGAAGGCT CTTTACTATT GCTTTATGAT AATGTTTCAT AGTTGGATAT
 CATAATTTAA ACAAGCAAAA CCAAAATTAAG GGCCAGCTCA TTCCTCCAC TCATGATCTA TAGATCTATA
 GATCTCTCGT GGGATCATTG TTTTCTCTT GATTCCACT TTGTGTTTCT AAGTACTGTG GTTTCCAAAT
 GTGTCAGTTT CATAGCCTGA AGAACGAGAT CAGCAGCTC TGTTCCACAT ACACTTCATT CTCAGTATTG
 TTTTGCCAAG TTCTAATTCC ATCAGAAGCT GGTCGAGATC CGGAACCCTT AATATAACTT CGTATAATGT
 ATGCTATACG AAGTTATTAG GTCCTCGAA GAGGTTCACT AGGCGCGCCG **AGCCAAGGTA GGAGCCCTTC**
TCCGGCCTC CCTCCAGCC GTCCTCTCC TCCCCTCGG GCGCCCTGG CGGTTGAGCC CCGCGAGCAG
GCTCGGACG CCTCGAGCG CCGACTCCTC GCCCTGCGC CCGAGCGGCT GCACCTGGG TGAGCGCGCC
AACTCCCCA CGGGAGCCC TGCTCCTGA GGGTGACCC TCCAGGCCG ACAGGGGCG GTTCGCTCCG
CTGTTGCCCC CCGGAAGTC GTCGGATTC TTCCGACTC GTGCATTTTT TTTTTTTTT GCCCCGAAT
CATGTTGAGT CTTGAACGT AGTTTCGCAA AATTATTTT ACTCGGCGAG GAGGGCTCG GGGGCGGGG
AGTGGGAGG AGTCGCCACC TCTACTCTG AAGAAAACG CTTTCTCCC CGCTGACCTA CCTCTTCCC

TCGCCGGCAG GTGTGTGGGG CCTCGGGTCA GTTCGAGTTG GAGATCCTGT CCATGCAGAA CGTGAACGGG
 GAGCTGCAGA ACGGGAAGCTG CTGCGGCGGC GCCCGGAACC CGGGAGACCG CAAGTGCACC CGCGACGAGT
 GTGACACATA CTTCAAAGTA CGACAGTCTT CACTGACTGA CTGACTGGAA AGAGGAAGGG CTGGAAGAGG
 AAGGAGCTTG GCGTAATCAT GGTCATAGCT GTTTCCTGTG TGAAATTGTT ATCCGCTCAC AATTCCACAC
 AACATACGAG CCGGAAGCAT AAAGTGTAAA GCCTGGGGTG CCTAATGAGT GAGCTAACTC ACATTAATTG
 CGTTGCGCTC ACTGCCCGCT TTCCAGTCGG GAAACCTGTC GTGCCAGCTG CATTAAATGAA TCGGCCAACG
 CGCGGGGAGA GCGGTTTTGC GTATTGGGCG CTCTCCGCT TCCTCGCTCA CTGACTCGT GCGCTCGGTC
 GTTCGGCTGC GCGGAGCGGT ATCAGCTCAC TCAAAGGCGG TAATACGGTT ATCCACAGAA TCAGGGGATA
 ACGCAGGAAA GAACATGTGA GCAAAAAGGCC AGCAAAAAGGC CAGGAACCGT AAAAAAGGCCG CGTTGTCTGGC
 GTTTTTCCAT AGGCTCCGCC CCCCTGACGA GCATCACAAA AATCGACGCT CAAGTCAGAG GTGGCGAAAC
 CCGACAGGAC TATAAAGATA CCAGGCGTTT CCCCTGGAA GCTCCCTCGT GCGCTCTCCT GTTCCGACCC
 TGCCGCTTAC CGGATACCTG TCCGCCTTTC TCCCTTCGGG AAGCGTGGCG CTTTCTCATA GCTCACGCTG
 TAGGTATCTC AGTTCGGTGT AGGTCGTTCC CTCCAAGCTG GGCTGTGTGC ACGAACCCCG CGTTCAGCCC
 GACCGCTGCG CTTATCCGG TAACTATCGT CTTGAGTCCA ACCCGTAAG ACACGACTTA TCGCCACTGG
 CAGCAGCCAC TGGAACAGG ATTAGCAGAG CGAGGTATGT AGGCGGTGCT ACAGAGTTCT TGAAGTGGTG
 GCCTAACTAC GGCTACACTA GAAGAACAGT ATTTGGTATC TCGCTCTGC TGAAGCCAGT TACCTTCGGA
 AAAAGAGTTG GTAGCTCTTG ATCCGGCAAA CAAACCACCG CTGGTAGCGG TGGTTTTTTT GTTTGCAAGC
 AGCAGATTAC GCGCAGAAA AAAGGATCTC AAGAAGATCC TTTGATCTTT TCTACGGGGT CTGACGCTCA
 GTGGAACGAA AACTCACGTT AAGGGATTTT GGTCATGAGA TTATCAAAAA GGATCTTCAC CTAGATCCTT
 TAAATTTAAA AATGAAGTTT TAAATCAATC TAAAGTATAT ATGAGTAAAC TTGGTCTGAC AGTTACCAAT
 GCTTAATCAG TGAGGCACCT ATCTCAGCGA TCTGTCTATT TCGTTCATCC ATAGTTGCC TACTCCCGT
 CGTGATAGTA ACTACGATC GGGAGGGCTT ACCATCTGGC CCCAGTGCTG CAATGATACC GCGAGAACCA
 CGCTCACCGG CTCCAGATTT ATCAGCAATA AACCAGCCAG CCGGAAGGGC CGAGCGCAGA AGTGGTCTG
 CAACCTTATC CGCCTCCATC CAGTCTATTA ATTGTTGCCG GGAAGCTAGA GTAAGTAGTT CGCCAGTTAA
 TAGTTTGCGC AACGTTGTTG CCATTGCTAC AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA
 TTCAGCTCCG GTTCCCAACG ATC

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_000214](#)

UniProt ID:

[P78504](#)

Synonyms:

AGS; AHD; AWS; CD339; HJ1; JAGL1

Summary:

The jagged 1 protein encoded by JAG1 is the human homolog of the Drosophila jagged protein. Human jagged 1 is the ligand for the receptor notch 1, the latter is involved in signaling processes. Mutations that alter the jagged 1 protein cause Alagille syndrome. Jagged 1 signalling through notch 1 has also been shown to play a role in hematopoiesis. [provided by RefSeq, Nov 2019]

Product images:

