

Product datasheet for **SC120058**

Jagged1 (JAG1) (NM_000214) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Jagged1 (JAG1) (NM_000214) Human Untagged Clone
Tag:	Tag Free
Symbol:	Jagged1
Synonyms:	AGS; AGS1; AHD; AWS; CD339; DCHE; HJ1; JAGL1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000214 edited
 GAATTCGGCACGAGCTTCTCCGAGAGCCGGCGGGCACGCGTCATTGTGTTACCTGCGGC
 CGGCCCGGAGCTAGGCTGGTTTTTTTTTTCTCCCTCCCTCCCCCTTTTCCATGCA
 GCTGATCTAAAAGGGAATAAAAGGCTGCGCATAATCATAATAATAAAAGAAGGGGAGCGC
 GAGAGAAGGAAAGAAAGCCGGGAGGTGGAAGAGGAGGGGAGCGTCTCAAAGAAGCGATC
 AGAATAATAAAAGGAGGCCGGGCTCTTTCCTTCTGGAACGGGCCGCTCTTGAAAGGGCT
 TTTGAAAAGTGGTGTGTTTTCCAGTCGTGCATGCTCCAATCGGCGGAGTATATTAGAGC
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 ACAGCAGCGCGCGGTCCCGAGTGCCCGCGGCGCGCGCGCAGCGATGCGTTCCCCACGG
 ACGCGCGCGCGGTCCGGGCGCCCCAAGCCTCCTGCTCGCCCTGCTGTGCCCTGCCA
 GCCAAGGTGTGTGGGCCTCGGGTCAGTTCGAGTTGGAGATCCTGTCCATGCAGAACGTG
 AACGGGGAGCTGCAGAACGGGAAGTGTGCGGGCGCGCCCGGAACCCGGGAGACCGAAG
 TGCACCCGCGACGAGTGTGACACATACTCAAAGTGTGCCTCAAGGAGTATCAGTCCCGC
 GTCACGGCCGGGGGCCCTGCAGCTTCGGCTCAGGGTCCACGCCTGTCATCGGGGCAAC
 ACCTTCAACCTCAAGGCCAGCCGCGGAACGACCGCAACCGCATCGTGTGCCTTTCAGT
 TTCGCCTGGCCGAGGTCTATACGTTGCTTGTGGAGGCGTGGGATTCCAGTAATGACACC
 GTTCAACCTGACAGTATTATTGAAAAGGCTTCTCACTCGGGCATGATCAACCCAGCCGG
 CAGTGGCAGACGCTGAAGCAGAACACGGGCGTTGCCACTTTGAGTATCAGATCCGCGTG
 ACCTGTGATGACTACTACTATGGCTTTGGCTGCAATAAGTCTGCCGCCCAGAGATGAC
 TTCTTTGGACACTATGCCTGTGACCAGAATGGCAACAAAACCTGCATGGAAGGCTGGATG
 GGCCCCGAATGTAACAGAGCTATTTGCCGACAAGGCTGCAGTCCCTAAGCATGGGTCTTGC
 AAACCTCCAGGTGACTGCAGGTGCCAGTACGGCTGGCAAGGCCTGACTGTGATAAGTGC
 ATCCCACACCCGGATGCGTCCACGGCATCTGTAATGAGCCCTGGCAGTGCCTCTGTGAG
 ACCAAGTGGGCGGCCAGCTCTGTGACAAAGATCTCAATTACTGTGGACTCATCAGCCG
 TGTCTCAATGGGGAACTTGTAGCAACACAGGCCCTGACAAATATCAGTGTTCCTGCCCT
 GAGGGGTATTGAGACCAACTGTGAAATTGCTGAGCACGCTGCCTCTCTGATCCCTGT
 CACAACAGAGGCAGCTGAAGGAGACCTCCCTGGGCTTTGAGTGTGAGTGTCCCGAGGC



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TGGACCGCCCCACATGCTCTACAAACATTGATGACTGTTCTCCTAATAACTGTTCCAC
 GGGGGACCTGCCAGGACCTGGTTAACGGATTTAAGTGTGTGTGCCCCCCACAGTGGACT
 GGGAAACGTGCCAGTTAGATGCAAAATGAATGTGAGGCCAAACCTTGTGTAAACGCCAAA
 TCCTGTAAGAATCTCATTGCCAGCTACTACTGCCACTGTCTTCCCGGCTGGATGGTCTAG
 AATTGTGACATAAATATTAATGACTGCCTTGGCCAGTGTGAGAATGACGCCTCTGTCTGG
 GATTTGGTTAATGGTTATCGCTGTATCTGTCCACCTGGCTATGCAGGCGATCACTGTGAG
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 ATCAACAGATTCCAGTGTCTGTGCCACTGGTTTCTCTGGAAACCTCTGTCAGCTGGAC
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 GACACACCTGAAGGGTGCAGTATATTTCTCCAACGTCTGTGGTCTCACGGGAAGTGC
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 GATGGTGTCAACTCCTACAAGTGCATCTGTAGTACGGCTGGGAGGGGGCCTACTGTGAA
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 AGTAGTGCCTGCCAACCCCTGCCATAATGGGGGCACATGTGTGGTCAACGGCGAGTCC
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 CCTTCAGCGAACAAATGAAATACATGTGGCCATTTCTGCTGAAGATATACGGGATGATGGG
 AACCCGATCAAGGAAATCACTGACAAAATAATCGATCTTGTTAGTAAACGTGATGGAAC
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 ACAGATTTCCCTTGTCCCTTGTGAGCTCTGTCTTAACTGTGGCTTGGATCTGTTGCTTG
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 ATGTCTAAAATAAGGACACACAATTCTGAAGTAGAAGAGGACGACATGGACAAACACCAG
 CAGAAAGCCCGGTTTGCCAAGCAGCCGGCGTATACGCTGGTAGACAGAGAAGAGAAGCCC
 CCCAACGGCAGCCGACAAAACACCCAAACTGGACAAAACAAACAGGACAACAGAGACTTG
 GAAAGTGCCAGAGCTTAAACCGAATGGAGTACATCGTATAGCAGACCGCGGCACTGCC
 GCCGCTAGGTAGAGTCTGAGGGCTTGTAGTTCTTTAACTGTCGTGTCATACTCGAGTCT
 GAGGCCGTTGCTGACTTXXXXXXXXXXXXXXXXXXXXXGATGTGTTTGAATTAAGGTT
 TTTGATAGCATTGAAGCGTATGGCTTTATTTTTTTGAACTCTTCTCATTACTTGTGTC
 TATAAGCCAAAATTAAGGTGTTTAAAAATAGTTTATTTTAAAACAATAGGATGGGCTTCT
 GTGCCAGAACTGATGGAATTTTTTTGTACGACGTCAGATGTTTAAAACACCTTCTA
 TAGCATCACTTAAAACACGTTTTAAGGACTGACTGAGGCAGTTTGAAGATTAGTTTAGAA
 CAGGTTTTTTTGTGTTGTTTTTGTGTTTTCTGCTTGTAGACTTGAAGAGACAGGCA
 GGTGATCTGCTGCAGAGCAGTAAGGGAACAAGTTGAGCTATGACTTAACATAGCCAAAAT
 GTGAGTGGTTGAATATGATTAATAATCAAAATTAATTGTGTGAACCTTGAAGCACACCA

ATCTGACTTTGTAAATTCTGATTTCTTTTCACCATTTCGTACATAACTGAACCACTTGT
 AGATTTGATTTTTTTTTTAATCTACTGCATTTAGGGAGTATTCTAATAAGCTAGTTGAAT
 ACTTGAACCATAAAATGTCCAGTAAAGTCACTGTTTAGATTTGCCATAGAGTACACTGCC
 TGCCTTAAGTGAGGAAATCAAAGTGCTATTACGAAGTTCAAGATCAAAAAGGCTTATAAA
 ACAGAGTAATCTTGTGGTTCCACCATTGAGACCGTGAAGATACTTTGTATTGTCCTATTA
 GTGTTATATGAACATACAAATGCATCTTTGATGTGTTGTTCTTGGCAATAAATTTTGAAA
 AGTAATATTTATTAATTTTTTTTGATGAAAACAAAAAAAAAAAAAAAAAACTCGAC

**5' Read Nucleotide
 Sequence:**

>OriGene 5' read for NM_000214 unedited
 NNNNTTTGTTTCGAATTTTGTGCATACGACTCATATAGGCGGCCCGGAATCGGCACGAGCT
 TCTCCGAGAGCCGGGCGGGCAGCGCTATTGTGTTACCTGCGGCCGGCCCGAGCTAGG
 CTGGTTTTTTTTTCTCCCTCCCTCCCTTTTTCCATGCAGCTGATCTAAAAGGGA
 AAAAAAGGCTGCGCATAATCATAATAATAAAGAAGGGGAGCGCGAGAGAAGGAAAGAAA
 GCCGGGAGGTGGAAGAGGAGGGGAGCGTCTCAAAGAAGCGATCAGAATAATAAAGGAG
 GCCGGGCTCTTTCCTTCTGGAACGGGCGCTCTTCAAAGGGCTTTTCAAAGTGGTGT
 GTTTCCAGTCGTGCATGCTCCAATCGGCGGAGTATATTAGAGCCGGACGCGGGCGCCG
 CAGGGGACGCGCGCAGCGCAGCACCGGCGGAGCACAGCGCAACAGCAGCGGGCGGCT
 CCCGAGTGCCCGGCGCGCGGCGCAGCGATGCGTTCCACGAGCGCGCGGCGGCTCCG
 GGCGCCCCCTAAGCTCTGCTCGCCCTGCTGTGCCCTGCGAGCCAAGGTGTGTGGG
 CCTCGGTTCAGTTCGAGTTGGAGATCCTGTCCATGCAGAACGTAACGGGGAGCTGCAGA
 ACGGGAAGTCTGCGGCGGCGCCGGAACCCGGGAGACCGCAAGTGCACCCGCGACGAGT
 GCGACACATACTCAAAGTGTGCTCAAGGAGTATCAGTCCCGCTCACGCCCCGGGGG
 CCCTGCAGCTTTGCTCAAGTCCACGCCTGTCATTCGGGGCCAACACCTTCAACCTCAA
 GGCCAGCCGCGGAACGACCGACCCCGCATNGTGCTGCCCTTAAAGTTTCTCTCGGCCAA
 GCCCTTACCC

**3' Read Nucleotide
 Sequence:**

>OriGene 3' read for NM_000214 unedited
 TTTGACGTATCCCGCTGACGGTGCAGAAATATTACCTTTTTTTTTGGNTNNCATACATT
 TTTAATTAATAAATATTACTTCTTCATAATTTATTGCCAAGAACAACACATCAAAGATG
 CATTTGTATGTTATATAACACTAATAGGACAATACAAAGTATCTTACGGTCTCAATGG
 TGAACCAACAAGATTACTCTGGNATATAAACTCCCGCTGCGCCTGAACTTCGNAATAGCA
 CTTTGATTTCTCACTTAAGGCAGGCAGTGTACTCTATGGCAAATCTAAACAGGGATCTT
 ACTGGACATTTTATGGGTCAAGTATTCAACTAGCTTATTAGAATACTCCCTAAATGCAGC
 AGATTAATAAAAAAAAAATCAAATCTACAAGTGGTTCAGCATTATGTACGAATGGTGAAGA
 AATCAGAATTTACAAAGTCAAGTTGGTGTGCTTCCAAGTTCACACAATTAATTTGATATT
 TTTAATCATATTCAACCACTCACATTTTGGCTATGTTAAGTCATAGCTCAACTTGTCCC
 TTAGTCTCTGCAGCAGATCACCTGCCTGGCTTTTTCAAGTCTAAAGCAGAAAAACAAA
 AAACAAACAAACAAAAAACCCGTTCTAAACTAATCCTCAAAGTGCCTCAGTCAGCCCTT
 AAAACGCGTCTTAAGTGTGCTATAGAAAAGCGTTTTAAACATCTGACGTCGTACAAAAAA
 AATTCCATCAGTATTTCTGGGCACAGAAGCCATCCTATTGTTTTAAAATAAACTATTTT
 CAAACACCTTAATTTGGCTTATAGGCCACAAGGAATGAGAAGAGTTCAAATAAATAAGG
 CATACGCTTACAATGCTTCCAAAACCTCCCTTTCTACCCTCCCTTAAATAAAAGGATG
 AGCTTAAAGCTCTTGATATTACGTATAAACAATTTCCCGGTTATAAAAAGATTATTTCA
 TACTTACAAGATCTATTTGAATTTTT

Restriction Sites:

NotI-NotI

ACCN:

NM_000214

Insert Size:

5800 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_000214.1](#), [NP_000205.1](#)

RefSeq Size: 5896 bp

RefSeq ORF: 3657 bp

Locus ID: 182

UniProt ID: [P78504](#)

Cytogenetics: 20p12.2

Domains: VWC, DSL, EGF_CA, EGF, EGF, VWC_out

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

Protein Pathways: Notch signaling pathway

Gene 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]