

## Product datasheet for RC211925

### Jagged 2 (JAG2) (NM\_002226) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Jagged 2 (JAG2) (NM_002226) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Jagged 2
Synonyms:	HJ2; SER2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211925 representing NM_002226 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGGGCGCAGGGCCGGGGGCGCCTTCCCCGGCGGCTGCTGCTGCTGCTGGCGCTCTGGGTGCAGGCGG  
CGCGGCCCATGGCTATTTGAGCTGCAGCTGAGCGCGTGCAGAACGTGAACGGGGAGCTGCTGAGCGG  
CGCCTGCTGTGACGGCGACGGCCGACAACCGCGCGGGGGGCTGCGGCCACGACGAGTGCACACGTAC  
GTGCGCGTGTGCCTTAAGGAGTACCAGGCCAAGGTGACGCCACGGGGCCCTGCAGTACGGCCACGGCG  
CCACGCCCGTGTGGGGCGCAACTCCTTCTACCTGCCCGCGGGCGCTGCGGGGACCGAGCGCGGGC  
GCGGGCCCGGGCGCGGACAGGACCCGGCCTCGTGTGATCCCTTCCAGTTCGCTGGCCGCGC  
TCCTTTACCTCATCGTGGAGGCTGGGACTGGGACAACGATACCAACCCGAATGAGGAGCTGCTGATCG  
AGCGAGTGTGCGATGCCGGCATGATCAACCCGAGGACCGCTGGAAGAGCCTGCACCTTACGCGGCCACGT  
GGCGCACCTGGAGCTGCAGATCCGCGTGCCTGCGACGAGAACTACTACAGCGCCACTTGAACAAGTTC  
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CGTGCCTGGGGAGTGCAGGTGCAGTACGGCTGGCAAGGGAGTCTGCGATGAGTGTGTCCCTACCC  
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GCCTGACCACTACCGCTGCACCTGCCCTGACGGTACTCGGGCAGGAACTGTGAGAAAGGCTGAGCAGCC  
TGACCTCCAACCCGTGTGCAACGGGGCTCTTGCCATGAGGTGCCGTCCGGCTTGAATGCCACTGCC  
CATCGGGCTGGAGCGGGCCACCTGTGCCCTTGACATCGATGAGTGTGCTTGAACCCGTGTGCGGCCG  
TGGCACCTGTGTGGACAGGTGGACGGCTTTGAGTGCATCTGCCCGAGCAGTGGGTGGGGCCACCTGC  
CAGCTGGACGCCAATGAGTGTGAAGGGAAGCCATGCCTAACGCTTTTCTTGAACAACTGATTGGCG  
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GCAGTGCAGCATGGGGCACCTGCAAGGACCTGGTGAACGGGTACCAGTGTGTGCCACGGGCTTC



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GGAGGCCGGCATTGCGAGCTGGAACGAGACAAGTGTGCCAGCAGCCCCTGCCACAGCGGGCGCCTCTGCG  
AGGACCTGGCCGACGGCTTCCACTGCCACTGCCCCAGGGCTTCTCCGGGCTCTCTGTGAGGTGGATGT  
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GAGGAGAGCGCAACAACAGTGGGCCCGCTCAACCCATCCGCAACCCATCGAGCGGCCGGGGGGCC  
ACAAGGACGTGCTTACCAGTGAAGAATTACGCGCCCGCCGCGCAGGGCGGACGAGGCGCTGCCCGG  
GCCGGCCGGCCACGCGGCCGTGAGGAGGATGAGGAGGACGAGGATCTGGCCCGGTGAGGAGGACTCC  
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GGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA

**Protein Sequence:** >RC211925 representing NM\_002226  
 Red=Cloning site Green=Tags(s)

MRAQGRGRLPRLLLLLALWVQAARPMGYFELQLSALRNVGELLSGACCDGDRTRTAGGCGHDECPTY  
 VRVCLKEYQAKVTPTGPCSYGHGATPVLGGNSFYLPAGAAGDRARARAGGDQDPLVVIPIQFAWPR  
 SFTLIVEAWDWDNDTTPNEELLIERVSHAGMINPEDRWKSLHFSGHVAHLELQIRVRCDENYSATCNKF  
 CRPRNDFFGHYTCDQYGNKACMDGWMGKECKEAVCKQGCNLLHGGCTVPGECRCVSYGWQGRFCDECVPYP  
 GCVHGSCVEPWQCNCECNWGGLLCDKDLNYCGSHHPCTNGGTCINAEPDQYRCTCPDGYSGRNCEKAEHA  
 CTSNPCANGGSCHEVPSGFECHECPGSGWGPCTCALDIDECASNPCAAGGTCVDQVDGFECICPEQWWGATC  
 QLDANECEGKPCLNAFSCKNLIGGYYCDCIPGWKGINCHINVNDCRGQCQHGCTCKDLVNGYQCVCPRGF  
 GGRHCELERDKCASSPCHSGGLCEDLADGFHCHCPQGFSGPLCEVDVDLCEPSPCRNGARCYNLEGDYYC  
 ACPDDFGKNCVPREPCPGGACRVIDGCGSDAGPGMPGTAASGVCGPHGRCVSPGGNFSCICDSGFTG  
 TYCHENIDDLGQPCRNGGTCIDEVDAFRFCPSGWEGELCDTNPNDCLPDPCHSRGRCYDLVDFYCAC  
 DDGWWKGTCHSREFQCDAYTCSNGGTCYDSGDTFRACAPPGWKGSTCAVAKNSSCLPNPCVNGGTCVSGS  
 ASFSCICRDGWEGRTCTHNTNDCNPLPCYNGGICVDGVNWFRCAPGFAGPDCRINIDECQSSPCAYGA  
 TCVDEINGYRCSPPGRAGPRCQEVIGFRSCWSRGTPFPHGSSWVEDCNCRCLDGRDRDCSKVWCGWKP  
 CLLAGQPEALSAQCPLGQRCKEAPGQCLRPPCEAWGECGAEPPSTPCLPRSGHLDNNCARLTLHFNRD  
 HVPQGTTVGAICSGIRSLPATRAVARDRLLVLLCDRASSGASAVEVAVSFSPARDLPDSSLIQGAHAHIV  
 AAITQRGNSSLLLAVTEVKVETVVTGGSSSTGLLVPVLCGAFSVLWLCVVLVWVTRKRRKERERSRLPR  
 EESANNQWAPLNPIRNPIERPGGHKDVLYQCKNFPPPRRADEALPGPAGHAAREDEEDELGRGEEDS  
 LEAEKFLSHKFTKDPGRSPGRPAHWASGPKVDNRAVRSINEARYAGKE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6220\\_b04.zip](https://cdn.origene.com/chromatograms/mk6220_b04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002226

**ORF Size:** 3714 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](mailto: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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_002226.2](#)

**RefSeq Size:** 5077 bp

**RefSeq ORF:** 3717 bp

**Locus ID:** 3714

**UniProt ID:** [Q9Y219](#)

**Cytogenetics:** 14q32.33

**Protein Families:** Druggable Genome, Transmembrane

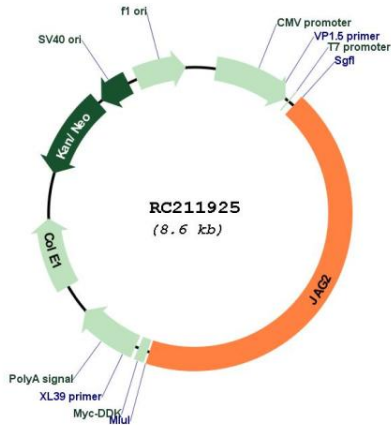
**Protein Pathways:** Notch signaling pathway

**MW:** 133.37 kDa

**Gene Summary:**

The Notch signaling pathway is an intercellular signaling mechanism that is essential for proper embryonic development. Members of the Notch gene family encode transmembrane receptors that are critical for various cell fate decisions. The protein encoded by this gene is one of several ligands that activate Notch and related receptors. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RC211925