

Product datasheet for **RC402616**

Jagged 2 (JAG2) (NM_002226) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	Jagged 2 (JAG2) (NM_002226) Human Mutant ORF Clone
Mutation Description:	M597I
Affected Codon#:	597
Affected NT#:	1791
Nucleotide Mutation:	JAG2 Mutant (M597I), Myc-DDK-tagged ORF clone of Homo sapiens jagged 2 (JAG2), transcript variant 1 as transfection-ready DNA
Effect:	Cleft lip ?
Symbol:	JAG2
Synonyms:	HJ2; SER2
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_002226
ORF Size:	3714 bp
Restriction Sites:	Sgfl-MluI
ORF Nucleotide Sequence:	>RC402616 representing NM_002226 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGGGCGCAGGGCCGGGGCGCCTTCCCCGGCGGCTGCTGCTGCTGCTGGCGCTCTGGGTGCAGGCGG
CGCGGCCCATGGGCTATTTGAGCTGCAGCTGAGCGCGCTGCGGAACGTGAACGGGGAGCTGCTGAGCGG
CGCCTGCTGTGACGGCGACGGCCGGACAACGCGCGGGGGGCTGCGGCCACGACGAGTGCACACGTAC
GTGCGCGTGTGCCTTAAGGAGTACCAGGCCAAGGTGACGCCACGGGGCCCTGCAGCTACGGCCACGGCG
CCACGCCCGTGTGGCGGCACTCCTTCTACCTGCCCGCGGGCGCTGCGGGGGACCGAGCGCGGGC
GCGGGCCCGGGCGGGCGGACCAGGACCCGGGCTCGTCGTCATCCCCTTCCAGTTCGCTGGCCGCGC
TCCTTTACCCTCATCGTGGAGGCTGGGACTGGGACAACGATACCACCCGAATGAGGAGCTGCTGATCG



[View online »](#)

AGCGAGTGTGCGATGCCGGCATGATCAACCCGGAGGACCCTGGAAGAGCCTGCACTTCAGCGGCCACGT
 GGCGCACCTGGAGCTGCAGATCCCGCTGCGCTGCGACGAGAACTACTACAGCGCCACTTGCAACAAGTTC
 TGCCGGCCCCGCAACGACTTTTTCGGCCACTACACTGCGACCAGTACGGCAACAAGCCCTGCATGGACG
 GCTGGATGGGCAAGGAGTGCAAGGAAGCTGTGTGTAACAAGGGTGAATTTGCTCCACGGGGATGCAC
 CGTGCTGGGGAGTGCAGGTGCAGCTACGGCTGGCAAGGGAGTTCTGCGATGAGTGTGTCCCCTACCCC
 GGCTGCGTGCATGGCAGTTGTGTGGAGCCCTGGCAGTGCAACTGTGAGACCAACTGGGGCGGCCTGCTCT
 GTGCAAAAGACCTGAACACTGTGGCAGCCACCACCCCTGCACCAACGGAGGCAGTGCATCAACGCCGA
 GCCTGACCAGTACCGCTGCACCTGCCCTGACGGCTACTCGGGCAGGAACGTGAGAAAGCTGAGCACGCC
 TGCACCTCCAACCCGTGTGCCAACGGGGCTCTTGCCATGAGGTGCCGTCCGGCTTGAATGCCACTGCC
 CATCGGGCTGGAGCGGGCCACCTGTGCCCTTGACATCGATGAGTGTGCTTGAACCCGTGTGCGGCCGG
 TGGCACCTGTGTGGACCAGGTGGACGGCTTTGAGTGCATCTGCCCGAGCAGTGGGTGGGGGCCACCTGC
 CAGCTGGACGCCAATGAGTGTGAAGGGAAGCCATGCCCTAACGCTTTTTCTTGCAAAACTGATTGGCG
 GCTATTACTGTGATTGCATCCCGGGCTGGAAGGGCATCAACTGCCATATCAACGTCAACGACTGTCGCGG
 GCAGTGTGAGCATGGGGGCACCTGCAAGGACCTGGTGAACGGGTACCAGTGTGTGTGCCACGGGGCTTC
 GGAGGCCGGCATTGCGAGCTGGAACGAGACGAGTGTGCCAGCAGCCCTGCCACAGCGGGCCCTCTGCG
 AGGACCTGGCCGACGGCTTCCACTGCCACTGCCCCAGGGCTTCTCCGGCCCTCTGTGAGGTGGATGT
 CGACCTTTGTGAGCCAAGCCCTGCCGGAACGGCGCTCGCTGCTATAACCTGGAGGGTGAATTTACTGC
 GCCTGCCTGATGACTTTGGTGGCAAGAACTGCTCCGTGCCCGCGAGCCGTGCCCTGGCGGGCCCTGCA
 GAGTGTGATGAGTGTGCGGGTACAGCGCGGGCCCTGGGATACCTGGCACAGCAGCCTCCGGCGTGTGTGG
 CCCCCATGGACGCTGCGTCAGCCAGCCAGGGGGCAACTTTTCTGCATCTGTGACAGTGGCTTTACTGGC
 ACCTACTGCCATGAGAACATTGACGACTGCCTGGGCCAGCCCTGCCGCAATGGGGGCACATGCATCGATG
 AGGTGGACGCCCTCCGCTGCTTCTGCCCCAGCGGCTGGGAGGGCAGCTCTGCGACCAATCCCAACGA
 CTGCCTTCCCGATCCCTGCCACAGCCGCGCCGCTGCTACGACCTGGTCAATGACTTCTACTGTGCGTGC
 GACGACGGCTGGAAGGGCAAGACCTGCCACTACGCGAGTTCCAGTGCATGCCTACACCTGCAGCAACG
 GTGGCACCTGCTACGACAGCGGCGACACCTTCCGCTGCGCCTGCCCGCCGCTGGAAGGGCAGCACCTG
 CGCCGTGCGCAAGAACAGCAGCTGCCTGCCAACCCCTGTGTGAATGGTGGCACCTGCGTGGGCAGCGGG
 GCCTCCTTCTCTGCATCTGCCGGGACGGCTGGGAGGGTCTGACTTCACTCACAATACCAACGACTGCA
 ACCCTCTGCCTTGTACAATGGTGGCATCTGTGTTGACGGCGTCAACTGGTTCGCTGCGAGTGTGCACC
 TGGCTTCCGGGGCCTGACTGCCGCATCAACATCGACGAGTCCAGTCCCTGCGCCTGTGCCTACGGGGCC
 ACGTGTGTGGATGAGATCAACGGGTATCGCTGTAGCTGCCACCCGCGCCAGCCGGCCCCCGGTGCCAGG
 AAGTGTGCGGGTTCGGGAGATCCTGCTGGTCCCGGGGACTCCGTTCCACACGGAAGCTCCTGGGTGGA
 AGACTGCAACAGCTGCCGCTGCCTGGATGGCCGCGTACTGCAGCAAGGTGTGGTGCAGATGGAAGCCT
 TGTCTGCTGGCCGGCCAGCCGAGGCCCTGAGCGCCAGTGCCCACTGGGGCAAAGGTGCCTGGAGAAGG
 CCCCAGGCCAGTGTCTGCGACCACCCTGTGAGGCCTGGGGGGAGTGGCGCGCAGAAGAGCCACCGAGCAC
 CCCCTGCCTGCCACGCTCCGGCCACCTGGACAATAACTGTGCCCGCCTCACCTTGCAATTTCAACCGTGAC
 CACGTGCCCGAGGGCACCACGGTGGGCGCCATTTGCTCCGGGATCCGCTCCCTGCCAGCCACAAGGGTGT
 TGGCACGGGACCGCTGCTGGTGTGCTTTGCGACCGGGCGTCTCGGGGGCCAGTCCGCTGGAGGTGGC
 CGTGTCTTTCAGCCCTGCCAGGGACCTGCCTGACAGCAGCCTGATCCAGGGCGCGGCCACGCCATCGTG
 GCCGCCATCACCCAGCGGGGAAACAGCTCACTGCTCCTGGCTGTCAACGAGTCAAGGTGGAGACGGTTG
 TTACGGCGGCTCTTCCACAGGTCTGCTGGTGCCTGTGCTGTGTGGTGCCTTACGCGTGTGTGGCTGGC
 GTGCGTGGTCTGTGCGTGTGGTGGACGCAAGCGCAGGAAAGAGCGGGAGAGGAGCCGGCTGCCCGGG
 GAGGAGAGCGCAACAACAGTGGGCCCGCTCAACCCATCCGCAACCCATCGAGCGGCCGGGGGGCC
 ACAAGGACGTGCTTACCAGTGAAGAATTACGCGCCCGCCGCGCAGGGCGGACGAGGCGCTGCCCGG
 GCCGGCCGCCACGCGGCCGTACGGGAGGATGAGGAGGACGAGGATCTGGGCCGCGTGGAGGACTCC
 CTGGAGGCGGAGAAGTTCTCTACACAAATTCACCAAGATCCTGGCCGCTCGCCGGGAGGCCGGCC
 ACTGGCCTCAGGCCCAAAGTGACAACCGCGCGGTGAGGAGCATCAATGAGGCCCGCTACGCCGGCAA
 GGAG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence: >RC402616 representing NM_002226
 Red=Cloning site Green=Tags(s)

MRAQGRGRLPRLLLLLALWVQAARPMGYFELQLSALRNVGELLSGACCDGDGRTTRAGGCGHDECPTY
 VRVCLKEYQAKVTPTGPCSYGHGATPVLGGNSFYLPAGAAGDRARARAGGDQDPGLVVIPFQFAWPR
 SFTLIVEAWDWDNDTTPNEELLIERVSHAGMINPEDRWKSLHFSGHVAHLELQIRVRCDENYSATCNKF
 CRPRNDFFGHYTCDQYGNKACMDGWMGKECKEAVCKQGCNLLHGGCTVPGECRCSYGWQGRFCDECVPYP
 GCVHGSCVEPWQCNCETNWGGLLCDKDLNYCGSHHPCTNGGTCINAEPDQYRCTCPDGYSGRNCEKAEHA
 CTSNPCANGGSCHVEVPSGFECPCPSGWSGPTCALDIDECASNCAAGGTCVDQVDGFECICPEQWVGATC
 QLDANECEGKPLNAFSCKNLIGGYCDCIPGWKGINCHINVNDCRGQCQHGCTCKDLVNGYQVCPRGF
 GGRHCELEERDECASSPCHSGGLCEDLADGFHCHCPQGFSGPLCEVDVDLCEPSPCRNGARCYNLEGDYYC
 ACPDDFGGKNCVPREPCPGGACRVIDGCGSDAGPGIPGTAASGVCGPHGRCVSOQGGNFSCICDSGFTG
 TYCHENIDDLGQPCRNGGTCIDEVDAFRFCPSGWEGELCDTNPNDCLPDPCHSRGRCYDLVNDFYCAC
 DDGWGKGTCHSREFQCDAYTCSNGGTCYDSGDTFRACACPPGWKGSTCAVAKNSSCLPNPCVNGGTCVGS
 ASFSCICRDGWEGRTCTHTNDCNPLPCYNGGICVDGVNWFRCAPGAGPDCRINIDECQSSPCAYGA
 TCVDEINGYRCSPPGRAGPRCQEVIGFGRSCWSRGTPFPHGSSWVEDCNCRCLDGRRDCSKVWCGWKP
 CLLAGQPEALSAQCPLGQRCLKAPGQCLRPPCEAWGECGAEPPSTPCLPRSGHLDNNCARLTLHFNRD
 HVPQGTTVGAICSGIRSLPATRAVARDRLLVLLCDRASSGASAVEVAVSFSPARDLPDSSLIQGAHAHIV
 AAITQRGNSSLLAVTEVKVETVVTGSSSTGLLVPVLCGAFSVLWLACVVLVWVTRKRRKERERSRLPR
 EESANNQWAPLNPINPIERPGGHKDVLVYQCKNFPPRRRADEALPGPAGHAAREDEEDEDLGRGEEDS
 LEAEKFLSHKFTKDPGRSPGRPAHWASGPKVDNRAVRSINEARYAGKE

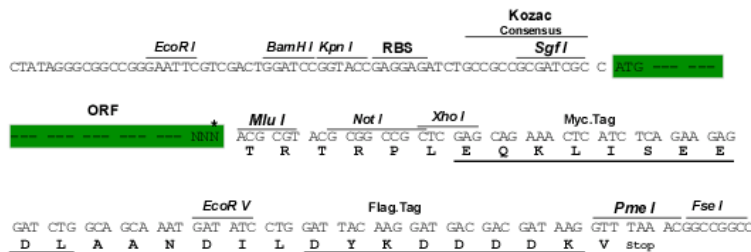
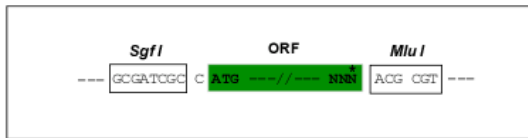
SGP TRRRLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

OTI Disclaimer:

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).
RefSeq:	NP_002217
RefSeq Size:	3714 bp
RefSeq ORF:	3717 bp
Locus ID:	3714
Cytogenetics:	14q32.33
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Notch signaling pathway
MW:	136.2 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]