

Product datasheet for **RG221039**

Jagged 2 (JAG2) (NM_145159) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Jagged 2 (JAG2) (NM_145159) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	JAG2
Synonyms:	HJ2; SER2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG221039 representing NM_145159 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGGGCGCAGGGCCGGGGGCGCCTTCCCCGGCGGCTGCTGCTGCTGCTGGCGCTCTGGGTGCAGGCGG
CGCGGCCCATGGCTATTTGAGCTGCAGCTGAGCGCGTGCAGAACGTGAACGGGGAGCTGCTGAGCGG
CGCCTGCTGTGACGGCGACGGCCGACAACCGCGCGGGGGGCTGCGGCCACGACGAGTGCACACGTAC
GTGCGCGTGTGCCTTAAGGAGTACCAGGCCAAGGTGACGCCACGGGGCCCTGCAGTACGGCCACGGCG
CCACGCCCGTGTGGCGGCAACTCCTTCTACCTGCCCGCGGGCGCTGCGGGGACCGAGCGCGGGC
GCGGGCCCGGGCGCGGACAGGACCCGGCCCTCGTCGTATCCCTTCCAGTTCGCTGGCCGCGC
TCCTTTACCTCATCGTGAGGGCCTGGGACTGGGACAACGATACCAACCCGAATGAGGAGCTGCTGATCG
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CGTGCCCTGGGGAGTGCAGGTGCAGTACGGCTGGCAAGGAGGTCTGCGATGAGTGTGCCCTACCCC
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CATCGGGCTGGAGCGGGCCACCTGTGCCCTTGACATCGATGAGTGTGCTTCAACCCGTGTGCGGCCGG
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TCCGGGCCTCTCTGTGAGGTGGATGTCGACCTTTGTGAGCCAAGCCCCTGCCGGAACGGCGCTCGCTGCT
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ATCAATGAGGCCCGCTACGCCGCAAGGAG

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG221039 representing NM_145159
 Red=Cloning site Green=Tags(s)

MRAQGRGRLPRLLLLLALWVQAARPMGYFELQLSALRNVNGELLSGACCDGDRTRTRAGGCGHDECDTY
 VRVCLKEYQAKVTPTGPCSYPHGATPVLGGNSFYLPAGAAGDRARARAGGDQDPLVVIPIQFAWPR
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 CRPRNDFFGHYTCDQYGNKACMDGWMGKECKEAVCKQGCNLLHGGCTVPGECRCVWGQGRFCDECVPYP
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 CGAEEPSTPCLPRSGHLDNNCARLTLHFNRDHPQGTTVGAICSGIRSLPATRAVARDRLLVLLCDRAS
 SGASAVEVAVSFSPARDLPDSSLIQAAHAIVAAITQRGNSSLLLAVTEVKVETVVTGGSSTGLLVPVLC
 GAFSVLWLACVVLVWTRKRRKERERSRLPREESANNQWAPLNPINPIERPGGHKDVLVQCKNFPPPP
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 INEARYAGKE

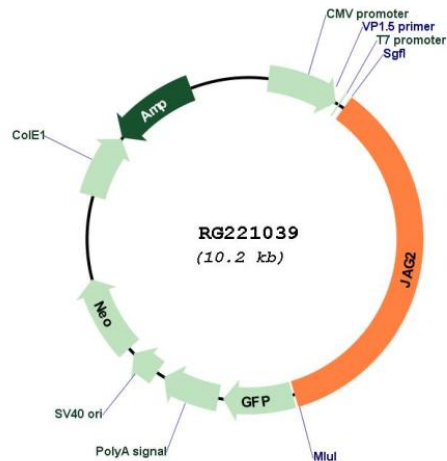
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_145159

ORF Size: 3600 bp

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).

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_145159.3](#)

RefSeq Size: 5721 bp

RefSeq ORF: 3603 bp

Locus ID: 3714

UniProt ID: [Q9Y219](#)

Cytogenetics: 14q32.33

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Notch signaling pathway

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]