

Product datasheet for **RG201297**

Asparagine synthetase (ASNS) (NM_001673) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Asparagine synthetase (ASNS) (NM_001673) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Asparagine synthetase
Synonyms:	ASNSD; TS11
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG201297 representing NM_001673
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGTGGCATTGGGCGCTGTTTGGCAGTGATGATTGCCTTTCTGTTTCAGTGTCTGAGTGCATGAAGA
 TTGCACACAGAGTCCAGATGCATTCCGTTTTGAGAATGTCAATGGATACACCAACTGCTGCTTTGGATT
 TCACCGGTTGGCGGTAGTTGACCCGCTGTTTGGAAATGCAGCCAATTCGAGTGAAGAAATATCCGTATTTG
 TGGCTCTGTTACAATGGTAAATCTACAACCATAAGAAGATGCAACAGCATTGAAATTTGAATACCAGA
 CCAAAGTGGATGGTGAATAATCCTTCTATTTATGACAAAGGAGGAATTGAGCAAAACAATTTGTATGTT
 GGATGGTGTGTTGCATTTGTTTTACTGGATACTGCCAATAAGAAAGTGTTCCTGGGTAGAGATACATAT
 GGAGTCAGACCTTTGTTTAAAGCAATGACAGAAGATGGATTTTTGGCTGTATGTTCAGAAGCTAAAGGTC
 TTGTTACATTGAAGCACTCCGCGACTCCCTTTTTAAAAGTGGAGCCTTTCTTCTGGACACTATGAAGT
 TTTGGATTTAAAGCCAAATGGCAAAGTTCATCCGTGGAATGGTTAAATATCATCACTGTCGGGATGTA
 CCCTGCACGCCCTCTATGACAATGTGGAGAACTCTTTCCAGGTTTTGAGATAGAACTGTGAAGAACA
 ACCTCAGGATCCTTTTTAATAATGCTGTAAGAAACGTTTGTATGACAGACAGAAGGATTGGCTGCCTTTT
 ATCAGGGGGCTTGGACTCCAGCTTGGTTGCTGCCACTCTGTTGAAGCAGCTGAAAGAAGCCCAAGTACAG
 TATCCTCTCCAGACATTTGCAATTGGCATGGAAGACAGCCCCGATTTACTGGCTGCTAGAAAGGTGGCAG
 ATCATATTGGAAGTGAACATTATGAAGTCTTTTTAACTCTGAGGAAGGCATTACGGCTCTGGATGAAGT
 CATATTTTCTTGGAACTTATGACATTACAACAGTTCGTGCTTCAGTAGGTATGATTTAATTTCCAAG
 TATATTCGGAAGAACACAGATAGCGTGGTATCTTCTCTGGAGAAGGATCAGATGAACTTACGCAGGTT
 ACATATATTTTACAAGGCTCCTTCTCTGAAAAAGCCGAGGAGAGAGTGAAGGCTTCTGAGGGAAC
 CTATTTTGTGATGTTCTCCGCGCAGATCGAACTACTGCTGCCCATGGTCTTGAAGTGAAGTCCCATTT
 CTAGATCATCGATTTTCTTCTTACTTGTCTCTGCCACCAGAAATGAGAATTCAAAGAATGGGATAG
 AAAAATCTCCTGAGAGAGACGTTTGGAGATTCCAATCTGATACCCAAAGAGATTCTCTGGCGACCAAA
 AGAAGCCTTCAGTGATGGAATAACTTCAGTTAAGAATTCCTGGTTTAAAGTTTTACAGGAATACGTTGAA
 CATCAGGTTGATGATGCAATGATGGCAAATGCAGCCAGAAATTTCCCTTCAATACTCTAAAACCAAG
 AAGGATATTACTACCGTCAAGTCTTTGAACGCCATTACCCAGGCCGGCTGACTGGCTGAGCCATTACTG
 GATGCCAAAGTGATCAATGCCACTGACCCTTCTGCCCGCAGCTGACCCACTACAAGTCAGCTGTCAA
 GCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG201297 representing NM_001673
 Red=Cloning site Green=Tags(s)

MCGIWFVSGDDCLSVQCLSAMKIAHRGPDAFRFENVNGYTNCCFGFHRLAVVDPLFGMQPIRVKYPYL
 WLCYNGEIYNHKKMQHFEFYQTKVDGEIILHLYDKGGIEQTCMLDGVFAFVLLDTANKKVFLGRDYG
 GVRPLFKAMTEDGFLAVCSEAKGLVTLKHSATPFLKVEPFLPGHYEVLDLKPNGKVASVEMVKYHHCRDV
 PLHALYDNVEKLFPGFEIETVKNLRLILFNNAVKKRLMTRRIGCLLSSGLDSSLVAATLLKQLKEAQVQ
 YPLQTFBIGMEDSPDLLAARKVADHIGSEHYEVLFNSEEGIQALDEVIFSLITYDITTVRASVGMYLISK
 YIRKNTDSVVIFSGEGSDELQGYIYFHKAPSPEKAEESERLLRELYLFDVLRADRTTAAHGLELRVPF
 LDHRFSSYYLSLPPMIRIPKNGIEKHLRETFFEDSNLIPKEILWRPKEAFSDGITSVKNSWFKILQEYVE
 HQVDDAMMANAAQKFPFNTPKTEGYYRQVFERHYPRADWL SHYWPKWINATDPSARTLTHYKSAVK
 A

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001673

ORF Size: 1683 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_001673.5](#)

RefSeq Size: 1994 bp

RefSeq ORF: 1686 bp

Locus ID: 440

UniProt ID: [P08243](#)

Cytogenetics: 7q21.3

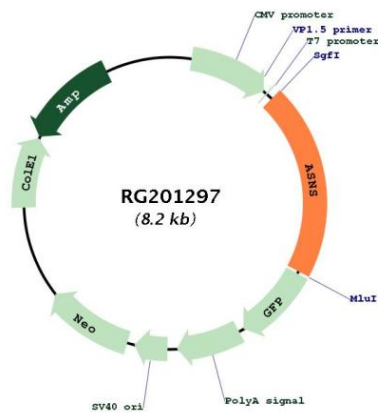
Domains: GATase_2, Asn_synthase

Protein Families: Druggable Genome

Protein Pathways: Alanine, aspartate and glutamate metabolism, Metabolic pathways, Nitrogen metabolism

Gene Summary: The protein encoded by this gene is involved in the synthesis of asparagine. This gene complements a mutation in the temperature-sensitive hamster mutant ts11, which blocks progression through the G1 phase of the cell cycle at nonpermissive temperature. Alternatively spliced transcript variants have been described for this gene. [provided by RefSeq, May 2010]

Product images:



Circular map for RG201297