

Product datasheet for **RG230145**

Asparagine synthetase (ASNS) (NM_001178077) Human Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | Asparagine synthetase (ASNS) (NM_001178077) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | ASNS |
| 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:

>RG230145 representing NM_001178077
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCAACAGCATTGTTGAATTTGAATACCAGACCAAAGTGGATGGTGGAGATAATCCTTCATCTTTATGACA
 AAGGAGGAATTGAGCAAACAATTTGTATGTTGGATGGTGTGTTTGCATTTGTTTTACTGGATACTGCCAA
 TAAGAAAGTGTTCCTGGGTAGAGATACATATGGAGTCAGACCTTTGTTTAAAGCAATGACAGAAGATGGA
 TTTTTGGCTGTATGTTTCAAGCTAAAGGTCTTGTACATTGAAGCACTCCGCGACTCCCTTTTTAAAG
 TGGAGCCTTTTCTTCTGGACACTATGAAGTTTGGATTTAAAGCCAAATGGCAAAGTTGCATCCGTGGA
 AATGGTTAAATATCATCACTGTCGGGATGTACCCCTGCACGCCCTCTATGACAATGTGGAGAAACTCTT
 CCAGGTTTTGAGATAGAACTGTGAAGAACAACCTCAGGATCCTTTTTAATAATGCTGTAAGAAACGTT
 TGATGACAGACAGAAGGATTGGCTGCCTTTTATCAGGGGGCTTGGACTCCAGCTTGGTTGCTGCCACTCT
 GTTGAAGCAGCTGAAAGAAGCCCAAGTACAGTATCCTCTCCAGACATTTGCAATTGGCATGGAAGACAGC
 CCCGATTTACTGGCTGCTAGAAAGGTGGCAGATCATATTGGAAGTGAACATTATGAAGTCCTTTTAACT
 CTGAGGAAGGCATTACAGCTCTGGATGAAGTCATATTTTCTTGGAAACTTATGACATTACAACAGTTTCG
 TGCTTCAGTAGGTATGTATTTAATTTCCAAGTATATTCGGAAGAACACAGATAGCGTGGTGTATCTTCT
 GGAGAAGGATCAGATGAACCTACGCAGGGTTACATATATTTTCAAGGCTCCTTCTCCTGAAAAAGCCG
 AGGAGGAGAGTGAGAGGCTTCTGAGGAACTCTATTTGTTTGTATGTTCTCCGCGCAGATCGAACTACTGC
 TGCCCATGGTCTTGAACCTGAGAGTCCCATTCTAGATCATCGATTTTCTTCTTACTTGTCTCTGCCA
 CCAGAAATGAGAATTCAAAGAATGGGATAGAAAAACATCTCCTGAGAGAGACGTTTGGAGATTCCAATC
 TGATACCCAAAGAGATTCTCTGGCGACCAAAGAAGCCTTCAGTGATGGAATAACTTCAGTTAAGAATTC
 CTGGTTTTAAGATTTTACAGGAATACGTTGAACATCAGGTTGATGATGCAATGATGCAAATGCAGCCAG
 AAATTTCCCTTCAATACTCCTAAAACAAAGAAGGATATTACTACCGTCAAGTCTTTGAACGCCATTACC
 CAGGCCGGGCTGACTGGCTGAGCCATTACTGGATGCCAAGTGGATCAATGCCACTGACCCTTCTGCCCG
 CACGCTGACCCACTACAAGTCAGCTGTCAAAGCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG230145 representing NM_001178077
 Red=Cloning site Green=Tags(s)

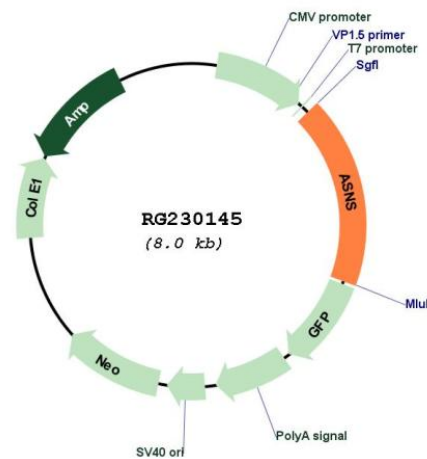
MQQHFEFEYQTKVDGEIILHL YDKGGIEQITCMLDGVFAFVLLDTANKKVFLGRDYGVRPLFKAMTEDG
 FLAVCSEAKGLVTLKHSATPFLKVEPFLPGHYEVLDLKPNGKVASVEMVKYHHCRDVPLHALYDNVEKLF
 PGFEIETVKNLRLILFNNAVKKRLMDDRRIGCLLSSGLDSSLVAATLLKQLKEAQYQYPLQTFAIMEDS
 PDLLAARKVADHIGSEHYEVLFNSEEGIQALDEVIFSLITYDITTVRASVGMYLISKYIRKNTDSVVIFS
 GEGSDEL TQGYIYFHKAPSPKAEESERLLRELYLFDVLRADRTTAAHGLELRVPLDHRFSSYYLSLP
 PEMRIPKNGIEKHLLRETFEDSNLIPKEILWRPKEAFSDGITSVKNSWFKILQEYVEHQVDDAMMANAAQ
 KFPFNTPKTKEGYRQVFERHYPRADWLSHYWMPKWINATDPSARTLTHYKSAVKA

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Plasmid Map:


ACCN: NM_001178077

ORF Size: 1434 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).

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| Reconstitution Method: | <ol style="list-style-type: none">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: | <u>NM_001178077.1</u> , <u>NP_001171548.1</u> |
| RefSeq Size: | 1709 bp |
| RefSeq ORF: | 1437 bp |
| Locus ID: | 440 |
| UniProt ID: | <u>P08243</u> |
| Cytogenetics: | 7q21.3 |
| 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] |