

# Recombinant Full Length Human NAGS Protein, C-Flag-tagged

**Cat. No.** NAGS-1012HFL    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Full Length Human NAGS Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.                                                                                                                                                                                                                                                                                                                                                          |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Source</b>           | Mammalian Cells                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Description</b>      | The N-acetylglutamate synthase gene encodes a mitochondrial enzyme that catalyzes the formation of N-acetylglutamate (NAG) from glutamate and acetyl coenzyme-A. NAG is a cofactor of carbamyl phosphate synthetase I (CPSI), the first enzyme of the urea cycle in mammals. This gene may regulate ureagenesis by altering NAG availability and, thereby, CPSI activity. Deficiencies in N-acetylglutamate synthase have been associated with hyperammonemia.          |
| <b>Form</b>             | 25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Molecular Mass</b>   | 58 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>AA Sequence</b>      | <p>MATALMAVVLRAAAVAPRLRGRGGTGGARRLSCGARRRAARGTSPGRRLSTAWS</p> <p>QPQPPPEEYAGADDVS QSPVAEEPSWVPSRPPVPHESPEPPSGRSLVQRDIQAF</p> <p>LNQCGASPGEARHWLTQFQTCHHSADKPFV IEVD EEV LK CQ QGVSSLAFLAFL</p> <p>QRMDMKPLVVLGLPAPTAPSGCLSFWEAKAQLAKSCKVLVDALRHN AAAAVPFFG</p> <p>GGSVLRAAEPAPHASYGGIVSVETDLLQWCLESGSIPILCPIGETAARRSVLLDSLEV</p> <p>TAS LAKALRPTKIIFLNNTGGLRDSSHKVLSNVNLPADLDLVCNAEWWSTKERQQMR</p> <p>LIVDVLSRLPHHSSAV ITAASTLLTELF SNKSGT LFKNAERMLRVRSLDKLDQGR LV</p> |

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DLVNASFGKKLRDDYLASLRPRLHSIYV SEGYNAAAILTMEPVLGGTPYLDKFVVSS  
 SRQGQSGSQMLWECLRRDLQTLFWRSRVTNPINPWYFKHSD  
 GSFSNKQWIFFWFGLADIRDSYELVNHAKGLPDSFHKPASDPGSTRTRPLEQKLISE  
 EDLAANDILDYKDDDDKV

|                         |                                                                                                                                               |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>           | > 80% as determined by SDS-PAGE and Coomassie blue staining.                                                                                  |
| <b>Stability</b>        | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. |
| <b>Storage</b>          | Store at -80 centigrade.                                                                                                                      |
| <b>Concentration</b>    | >50 ug/mL as determined by microplate BCA method.                                                                                             |
| <b>Preparation</b>      | Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.                              |
| <b>Protein Pathways</b> | Arginine and proline metabolism, Metabolic pathways                                                                                           |
| <b>Full Length</b>      | Full L.                                                                                                                                       |

## GENE INFORMATION

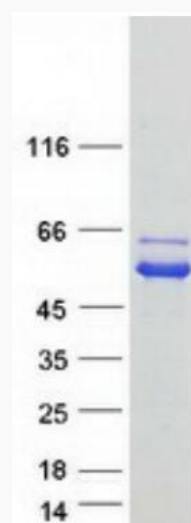
|                        |                                                          |
|------------------------|----------------------------------------------------------|
| <b>Gene Name</b>       | NAGS N-acetylglutamate synthase [ Homo sapiens (human) ] |
| <b>Official Symbol</b> | NAGS                                                     |
| <b>Synonyms</b>        | AGAS; ARGA                                               |
| <b>Gene ID</b>         | 162417                                                   |

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|-----------------------|-------------|
| <b>mRNA Refseq</b>    | NM_153006.3 |
| <b>Protein Refseq</b> | NP_694551.1 |
| <b>MIM</b>            | 608300      |
| <b>UniProt ID</b>     | Q8N159      |



Coomassie blue staining of purified NAGS protein.