

Product datasheet for RC223189

ASS1 (NM_000050) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ASS1 (NM_000050) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ASS1
Synonyms:	ASS; CTLN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223189 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCAGCAAAGGCTCCGTGGTTCTGGCCTACAGTGGCGGCCTGGACACCTCGTGCATCCTCGTGTGGC
TGAAGGAACAAGGCTATGACGTATTGCCTATCTGGCCAACATTGGCCAGAAGGAAGACTTCGAGGAAGC
CAGGAAGAAGGCACTGAAGCTTGGGGCCAAAAAGGTGTTTCATTGAGGATGTCAGCAGGGAGTTTGTGGAG
GAGTTCATCTGGCCGGCCATCCAGTCCAGCGCACTGTATGAGGACCGCTACCTCCTGGGCACCTCTCTTG
CCAGGCCCTGCATCGCCCGCAAACAAGTGAAATCGCCAGCGGGAGGGGCAAGTATGTGTCCCACGG
CGCCACAGGAAAGGGGAACGATCAGGTCCGGTTTGTAGCTCAGCTGCTACTCACTGGCCCCCAGATAAAG
GTCATTGCTCCCTGGAGGATGCCTGAATTCTACAACCGTTCAAGGGCCGAATGACCTGATGGAGTACG
CAAAGCAACACGGGATCCCATCCCGTCACTCCCAAGAACCCTGGAGCATGGATGAGAACCCTCATGCA
CATCAGCTACGAGGCTGGAATCCTGGAGAACCCCAAGAACCAAGCGCCTCCAGGTCTCTACACGAAGACC
CAGGACCCAGCCAAAGCCCCAACCCCTGACATTCTCGAGATCGAGTTCAAAAAGGGTCCCTGTGA
AGGTGACCAACGTCAAGGATGGCACCACCACAGACCTCCTGGAGCTCTTCAATGTAACGAAGT
CGCGGGCAAGCATGGCGTGGCCGTATTGACATCGTGGAGAACCCTTCATTGGAATGAAGTCCCGAGGT
ATCTACGAGACCCAGCAGGCACCATCCTTTACCACGCTCATTAGACATCGAGGCCCTCCACATGGACC
GGGAAGTGCACAAAATCAAACAAGGCTGGGCTTGAAATTTGCTGAGCTGGTGTATACCGTTTCTGGCA
CAGCCCTGAGTGTGAATTTGTCCGCCACTGCATCGCCAAGTCCCAGGAGCGAGTGAAGGGAAAAGTGCAG
GTGTCCGTCTCAAGGGCCAGGTGTACATCCTCGGCCGGGAGTCCCCTGTCTCTACAATGAGGAGC
TGGTGAGCATGAACGTGCAGGGTATTATGAGCCAAGTATGCCACCGGGTTCATCAACATCAATCCCT
CAGGCTGAAGGAATATCATCGTCTCCAGAGCAAGGTCCTGCCAAA

ACGGTACGGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000050.4](#)

RefSeq Size: 1863 bp

RefSeq ORF: 1239 bp

Locus ID: 445

UniProt ID: [P00966](#)

Cytogenetics: 9q34.11

Domains: Arginosuc_synth

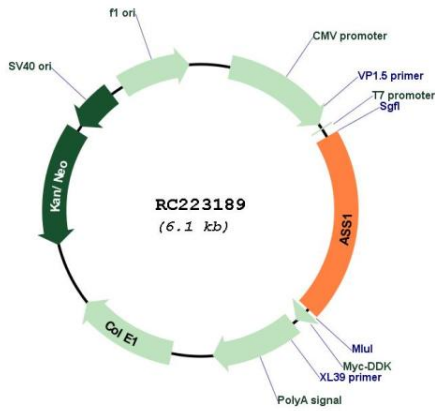
Protein Families: Druggable Genome

Protein Pathways: Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Metabolic pathways

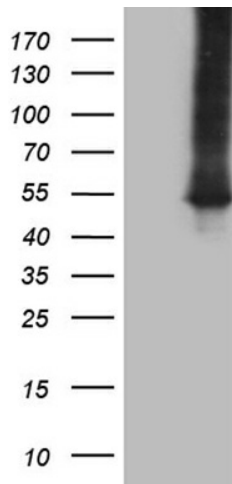
MW: 46.5 kDa

Gene Summary: The protein encoded by this gene catalyzes the penultimate step of the arginine biosynthetic pathway. There are approximately 10 to 14 copies of this gene including the pseudogenes scattered across the human genome, among which the one located on chromosome 9 appears to be the only functional gene for argininosuccinate synthetase. Mutations in the chromosome 9 copy of this gene cause citrullinemia. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Aug 2012]

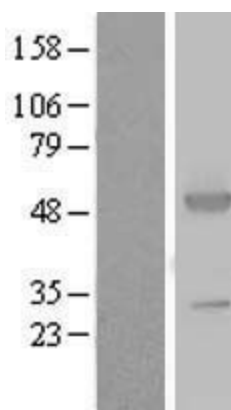
Product images:



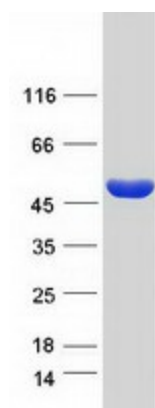
Circular map for RC223189



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ASS1 (Cat# RC223189, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ASS1 (Cat# [TA809216])(1:2000). Positive lysates [LY424955] (100ug) and [LC424955] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424955]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223189 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ASS1 protein (Cat# [TP323189]). The protein was produced from HEK293T cells transfected with ASS1 cDNA clone (Cat# RC223189) using MegaTran 2.0 (Cat# [TT210002]).