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Product datasheet for SC114775

ASPA (NM_000049) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ASPA (NM_000049) Human Untagged Clone
Tag:	Tag Free
Symbol:	ASPA
Synonyms:	ACY2; ASP
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC114775 sequence for NM_000049 edited (data generated by NextGen Sequencing)

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ATGACTTCTTGTCACATTGCTGAAGAACATATACAAAAGGTTGCTATCTTTGGAGGAACC
CATGGGAATGAGCTAACCGGAGTATTTCTGGTTAAGCATTGGCTAGAGAATGGCGCTGAG
ATTCAGAGAACAGGGCTGGAGGTAAAACCATTTATTACTAACCCCAGAGCAGTGAAGAAG
TGTACCAGATATATTGACTGTGACCTGAATCGCATTTTTGACCTTGAAAATCTTGGCAAA
AAAATGTCAGAAGATTTGCCATATGAAGTGAGAAGGGCTCAAGAAATAAATCATTTATTT
GGTCCAAAAGACAGTGAAGATTCCTATGACATTATTTTTGACCTTCACAACACCACCTCT
AACATGGGGTGCACTCTTATTCTTGAGGATTCCAGGAATAACTTTTTAATTCAGATGTTT
CATTACATTAAGACTTCTCTGGCTCCACTACCCTGCTACGTTTATCTGATTGAGCATCCT
TCCCTCAAATATGCGACCACTCGTTCCATAGCCAAGTATCCTGTGGGTATAGAAGTTGGT
CCTCAGCCTCAAGGGGTTCTGAGAGCTGATATCTTGGATCAAATGAGAAAAATGATTAAA
CATGCTCTTGATTTTATACATCATTTCAATGAAGGAAAAGAATTTCCTCCCTGCGCCATT
GAGGTCTATAAAATTATAGAGAAAGTTGATTACCCCCGGGATGAAAATGGAGAAATTGCT
GCTATCATCCATCCTAATCTGCNGGATCAAGACTGGAAACCACTGCATCCTGGGGATCCC
ATGTTTTTAACTCTTGATGGGAAGACGATCCCACTGGGCGGAGACTGTACCGTGTACCCC
GTGTTTGTGAATGAGGCCGCATATTACGAAAAGAAAGAAGCTTTTGCAAAGACAACTAAA
CTAACGCTCAATGCAAAAAGTATTCGCTGCTGTTTACATTAG

Clone variation with respect to NM_000049.2
743 a=>n
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View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000049 unedited
TGGATTTTGTAACACGATTTTCTATAGGGCGGCCGCGAATTCGGCACGAGGATGACTTCT
TGTCACATTGCTNGAAGAACATATACAAAAGGTTGCTATCTTTGGAGGAACCCATGGGAA
TGAGCTAACCGGAGTATTTCTGGTTAAGCATTGGCTAGAGAATGGCGCTGAGATTCAGAG
AACAGGGCTGGAGGTAAAACCATTTATTACTATTTTTATNACAGCGAAGAAGTGTACCAG
ATATATTGACTGTGACCTGAATCGCATTTTTGACCTTGAAAATCTTGGCAAAAAAATGTC
AGAAGATTTGCCATATGAAGTGAGAAGGGCTCAAGAAATAAATCATTTATTTGGTCCAAA
AGACAGTGAAGATTCCTATGACATTATTTTTGACCTTCACAACACCACCTCTAACATGGG
GTGCACTCTTATTCTTGAGGATTCCAGGAATAACTTTTTAATTCAGATGTTTCATTACAT
TAAGACTTCTCTGGCTCCACTACCCTGCTACGTTTATCTGATTGAGCATCCTTCCCTCAA
ATATGCGACCACTCGTTCCATAGCCAAGCATCCTGTGGGCATAGAAGTTGGCCCTCACCC
TCAAGGCGTTCTGAGAGCTGATATCTTGGATCACATGACAAAAAGATTAAACATGCCTTT
GATTTTATACATTCTTTCAATGAAGGAAAAGAATTTCCTCCCTGCGCCATTGGAGTCCTA
TAAAATTATAGAGAAAGGTTGATTACCCTCGGGATGAAAACTGTAGCAACTCGGTGCTTA
TCATTCCCTCCTAATCTGCAGAGGCATAAGAACTGGAACCCACTGCATCCTGCGGATCCC
ATGTCTTTAAACTTTGGATCGGAAAACGATTCCCCTGTGGCGGAGACTGTCCCGTGGCCC
CCGGGCTTGTGACGGACGCCCGCTATTACTAAAGCAGGAATCTTCTTGCAAGCACCC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000049 unedited
TACCGCGGGCCGCACTTCTAGAAAGTCGAAGTTTTTTTCTTTTTTTTTCTTTTCTTTTTC
CACAGAATCACCATAGCAGATATAATAAATAAATCATAAAAAACCTTGAAATATTATCAA
AGGGTGACACAGAGACAAGGAGTGAGCACATGCTGTTGGAAACATGGCACTGTTAAACTT
TCTAAACACAGGGTTGCCAAAAACCTTCAATTTGGAAAAAAAGTACAGTATCCGTGAAGT
GTATTAAGGCAAAGCACAATAAAACAAATAACTTTATATATATCTATTTCAATTTTATAT
TCTGAATACAAAGGCTGTTTATTAAAAATGTTGAGCTACCCAAGTATCATGTATAATAAA
CTATATAGAAATAGGAAACACTTCTTTGAATAAGCTACATACATAAAATATGATATCTTT
AAAGATATATTAATTAATTTAAAAAATTTGCTTAAATGCCTACCGAATAAGGCACTGTGC
TAGGAGCTATGTATGCAGTTGAATAAGGCACAACCCTACTCTTAAGGAGCTTACAGACTA
GCAGAATTTGTAAGACACCGTGTAAGATGTAAGCTGGAAGTGATTTCTAATGTAAACAGC
AGCGAATACTTTCTGCATTGAGCGTTAGTTTAGTTGCCTTTGCAAAAGCTTCTTTCTTTT
CGTATATGCGGCCTCATTCACAAACACGGGTACACGGTACAGTCTCCGCCCAGGGGGATC
GTCTTCCATCAAGAGTTAAAACATGGGATCCCCAGTATCAGTGGTTTCCAGTCTTGATCC
TCTGAACATAAGATGGATGATAGCACCTTTTTTCCATCTCATTCCGGGGAAATCAACTTT
CTCTTTAATTTATAAACCCCAATGCGCAAGGAGGAATTCTTTTCCTCCTGAAAGAAGTTA
AAATCAGAACTGTTTATCATCTTCTCATTGACCCAAATTACCTTTAAAACCCTGAGGCGA
GACAATTCTTTCCCAGAACTGGTTTGGAAAAAGTCCCTTTTGAGGAGGAGCCAACC

Restriction Sites: NotI-NotI

ACCN: NM_000049

Insert Size: 1650 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_000049.2, NP_000040.1
RefSeq Size:	1435 bp
RefSeq ORF:	942 bp
Locus ID:	443
UniProt ID:	P45381
Cytogenetics:	17p13.2
Domains:	Aste_AspA
Protein Families:	Druggable Genome
Protein Pathways:	Alanine, aspartate and glutamate metabolism, Histidine metabolism
Gene Summary:	This gene encodes an enzyme that catalyzes the conversion of N-acetyl_L-aspartic acid (NAA) to aspartate and acetate. NAA is abundant in the brain where hydrolysis by aspartoacylase is thought to help maintain white matter. This protein is an NAA scavenger in other tissues. Mutations in this gene cause Canavan disease. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (1) and variant 2 encode the same protein.