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Product datasheet for MR201590

Abhd12 (NM_024465) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Abhd12 (NM_024465) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Abhd12
Synonyms:	1500011G07Rik; 6330583M11Rik; AI431047; AW547313
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR201590 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACGTATGACGCACTCCATGTTTTTGACTGGATCAAAGCAAGAAGTGGTGATAATCCTGTGTATATTT
GGGGCCATTCACTGGGCACCGGAGTGGCAACAAATCTGGTACGGCGCCTCTGTGAGCGAGAGACGCCACC
AGATGCCCTTATATTGGAGTCTCCATTCACAAATATTCGTGAAGAAGCAAAGAGTCATCCATTTTCAGTG
ATATACCGATACTTCCCTGGCTTTGACTGGTTCTTCCTCGACCCCATTACAAGCAGTGGAATTAAATTTG
CAAATGACGAAAATATGAAGCACATCTCCTGCCCTCTGCTCATCTTGCATGCCGAGGATGATCCAGTTGT
GCCCTTTCATCTCGGTAGAAAGCTATACAACATTGCTGCGCCATCTCGAAGTTTCCGAGACTTCAAAGTC
CAGTTTATCCCCTTTCACTCAGACCTTGGCTACAGACATAAATACATCTACAAGAGCCCAGAGCTTCCAA
GGATACTGAGGGAATTCCTAGGGAAGTCGGAACCGGAACGCCAGCAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR201590 protein sequence
Red=Cloning site Green=Tags(s)

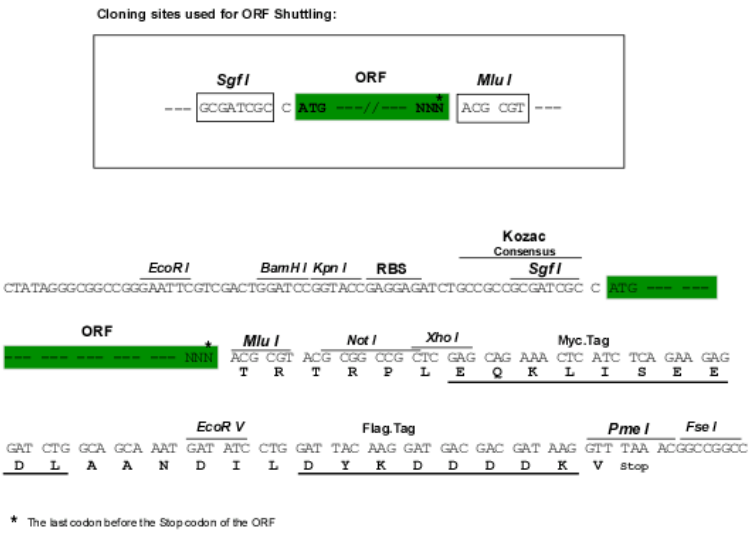
MTYDALHVFDWIKARSGDNPVYIWGHSLGTGVATNLVRRLCERETPPDALILESPFTNIREEAKSHPFSV
IYRYFPGFDWFFLDPITSSGIKFANDENMKHISCPLLILHAEDDPVVPFHLGRKLYNIAAPSRSFRDFKV
QFIPFHSDLGYRHKYIYKSPELPRILREFLGKSEPERQH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_024465

ORF Size: 537 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.

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

RefSeq: NM_024465.1

RefSeq Size: 1967 bp

RefSeq ORF: 1197 bp

Locus ID: 76192

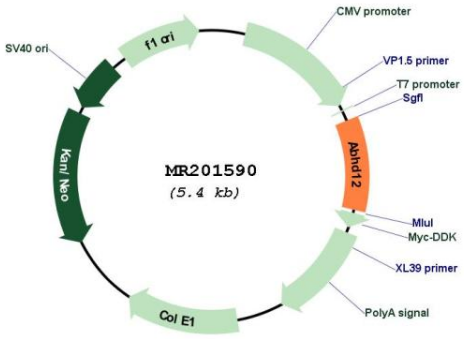
UniProt ID: Q99LR1

Cytogenetics: 2 G3

MW: 20.9 kDa

Gene Summary: Lysophosphatidylserine (LPS) lipase that mediates the hydrolysis of lysophosphatidylserine, a class of signaling lipids that regulates immunological and neurological processes (PubMed:23297193, PubMed:25580854, PubMed:30420694). Represents a major lysophosphatidylserine lipase in the brain, thereby playing a key role in the central nervous system (PubMed:23297193). Also able to hydrolyze oxidized phosphatidylserine; oxidized phosphatidylserine is produced in response to severe inflammatory stress and constitutes a proapoptotic 'eat me' signal (PubMed:30643283). Also has monoacylglycerol (MAG) lipase activity: hydrolyzes 2-arachidonoylglycerol (2-AG), thereby acting as a regulator of endocannabinoid signaling pathways (PubMed:18096503). Has a strong preference for very-long-chain lipid substrates; substrate specificity is likely due to improved catalysis and not improved substrate binding (PubMed:30237167).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR201590