

Product datasheet for **RG216963**

ABHD12 (NM_001042472) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABHD12 (NM_001042472) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ABHD12
Synonyms:	ABHD12A; BEM46L2; C20orf22; dj965G21.2; hABHD12; PHARC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216963 representing NM_001042472 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGAAGCGGACCGAGCCCGTCGCCTTGGAGCATGAGCGCTGCGCCGCGGGCTCGTCCTCTCCG
GCTCGGCCCGCGGGCTGGACCCGACTGCCGCTGAAGCAGAACCTACGCTGACGGGCCCGCGGC
GGCTGAGCCGCTGCGCAGCCGACGCGGAATGAAGCGGGCGTGGCAGGCGAAAGGGCGTGTGGTTG
CGCCTGAGGAAGATACTTTCTGTGTTTGGGGTTGTACATTGCCATTCCATTTCTCATCAAATATGTC
CTGGAATACAGGCCAACTGATTTTCTGAATTCGTAAGAGTCCCTATTTTCATTGATTTGAAAAACC
ACAGGATCAAGTTTGAATCACACGTGTAACACTACCTGACGCCAGAGGAAGACGTGACCATTTGGAGTC
TGGCACACCGTCCCTGCAGTCTGGTGAAGAACGCCAAAGACCAGATGTGGTATGAGGATGCCCT
TGGCTTCCAGCCACCCTATCATTCTGTACCTGCATGGGAACGCAGGTACCAGAGGAGCGACCACCGCT
GGAGCTTTACAAGGTGCTGAGTTCCTTGGTTACCATGTGGTCACCTTTGACTACAGAGTTGGGGTGAC
TCAGTGGGAACGCCATCTGAGCGGGCATGACCTATGACGCACTCCACGTTTTGACTGGATCAAAGCAA
GAAGTGGTGACAACCCCGTGTACATCTGGGGCCACTCTCTGGGCACTGGCGTGGCGACAAATCTGGTGCG
GCGCCTCTGTGAGCGAGAGACGCTCCAGATGCCCTTATATTGGAATCTCCATTTACTAATATCCCGCAA
GAAGCTAAGAGCCATCCATTTTCAGTGATATCGATACTCCCTGGGTTTGAATGTTCTTCTTGGTGC
CTATTACAAGTAGTGGAATTAATTTGCAAATGATGAAAACGTGAAGCACATCTCCTGTCCCTGCTCAT
CCTGCACGCTGAGGACGACCCGGTGGTGCCTTCCAGCTTGGCAGAAAGCTCTATAGCATCGCCGACCA
GCTCGAAGCTTCCGAGATTTCAAAGTTCAGTTTGTGCCCTTTCATTTCAGACCTTGGCTACAGGCACAAAT
ACATTTACAAGAGCCCTGAGCTGCCACGGATACTGAGGGAATTCCTGGGAAGTCGGAGCCTGAGCACCA
GCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG216963 representing NM_001042472
 Red=Cloning site Green=Tags(s)

MRKRTEPVALEHERCAAAGSSSSGSAALDADCRLKQNLRLTGPAAEPRCAADAGMKRALGRRKGVWL
 RLRKILFCVLGLYAIIPFLIKLCPGIQAKLIFLNFRVVPYFIDLKPKDQQLNHTCNYYLQPEEDVTIGV
 WHTVPAVWWKNAQKQDMWYEDALASSHP IILYLHGNAGTRGGDHRVELYKVLSSLGYHVVTFFDYRGWGD
 SVGTPTSERGMTYDALHVFWDWIKARSGDNPVYIWHGSLGTGVATNLVRRLCERETPPDALILESPFTNIRE
 EAKSHPFVSIYRYFPGFDWFFLDPTITSSGIKFANDENVKHI SCPLLLILHAEDDPVVPFQLGRKLYSIAAP
 ARSFRDFKVFVFPFSDLG YRHKYIYKSP ELPRLREFLGKSEPEHQH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001042472

ORF Size: 1194 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.

RefSeq: [NM_001042472.3](#)

RefSeq Size: 1983 bp

RefSeq ORF: 1197 bp

Locus ID: 26090

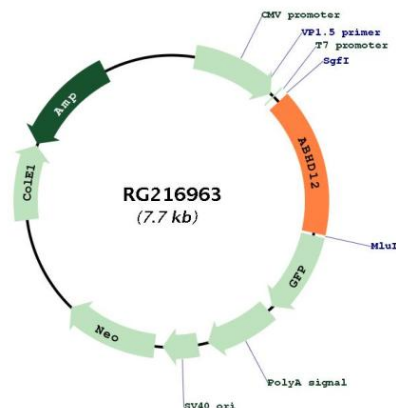
UniProt ID: [Q8N2K0](#)

Cytogenetics: 20p11.21

Protein Families: Protease, Transmembrane

Gene Summary: This gene encodes an enzyme that catalyzes the hydrolysis of 2-arachidonoyl glycerol (2-AG), the main endocannabinoid lipid transmitter that acts on cannabinoid receptors, CB1 and CB2. The endocannabinoid system is involved in a wide range of physiological processes, including neurotransmission, mood, appetite, pain appreciation, addiction behavior, and inflammation. Mutations in this gene are associated with the neurodegenerative disease, PHARC (polyneuropathy, hearing loss, ataxia, retinitis pigmentosa, and cataract), resulting from an inborn error of endocannabinoid metabolism. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene.[provided by RefSeq, Jan 2011]

Product images:



Circular map for RG216963