OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC205260

ABHD2 (NM_007011) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ABHD2 (NM_007011) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ABHD2
Synonyms:	HS1-2; LABH2; PHPS1-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC205260 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAATGCCATGCTGGAGACTCCCGAACTCCCAGCCGTGTTTGATGGAGTGAAGCTGGCTGCAGTGGCTG
CTGTGCTGTACGTGATCGTCCGGTGTTTGAACCTGAAGAGCCCCACAGCCCCACCTGACCTCTACTTCCA
GGACTCGGGGCTCTCACGCTTTCTGCTCAAGTCCTGTCCTCTTCTGACCAAAGAATACATTCCACCGTTG
ATCTGGGGGAAAAGTGGACACATCCAGACAGCCTTGTATGGGAAGATGGGAAGGGTGAGGTCGCCACATC
CTTATGGGCACCGGAAGTTCATCACTATGTCTGATGGAGCCACTTCTACATTCGACCTCTTCGAGCCCTT
GGCTGAGCACTGTGTTGGAGATGATATCACCATGGTCATCTGCCCTGGAATTGCCAATCACAGCGAGAAG
CAATACATCCGCACTTTCGTTGACTACGCCCAGAAAAATGGCTATCGGTGCGCCGTGCTGAACCACCTGG
GTGCCCTGCCCAACATTGAATTGACCTCGCCACGCATGTTCACCTATGGCTGCACGTGGGAATTTGGAGC
CATGGTGAACTACATCAAGAAGACATATCCCCTGACCCAGCTGGTCGTCGTGGGCTTCAGCCTGGGTGGT
AACATTGTGTGCAAATACTTGGGGGAGACTCAGGCAAACCAAGAGAAGGTCCTGTGCTGCGTCAGCGTGT
GCCAGGGGTACAGTGCACTGAGGGCCCAGGAAACCTTCATGCAATGGGATCAGTGCCAGCGGTTCTACAA
CTTCCTCATGGCTGACAACATGAAGAAGATCATCCTCTCGCACAGGCAAGCTCTTTTTGGAGACCATGTT
AAGAAACCCCAGAGCCTGGAAGACACGGACTTGAGCCGGCTCTACACAGCAACATCCCTGATGCAGATTG
ATGACAATGTGATGAGGAAGTTTCACGGCTATAACTCCCTGAAGGAATACTATGAGGAAGAAAGTTGCAT
GCGGTACCTGCACAGGATTTATGTTCCTCTCATGCTGGTTAATGCAGCTGACGATCCGTTGGTGCATGAA
AGTCTTCTAACCATTCCAAAATCTCTTTCAGAGAAACGAGAGAACGTCATGTTTGTGCTGCCTCTGCATG
GGGGCCACTTGGGCTTCTTTGAGGGCTCTGTGCTGTTCCCCGAGCCCCTGACATGGATGGATAAGCTGGT
GGTGGAGTACGCCAACGCCATTTGCCAATGGGAGCGTAACAAGTTGCAGTGCTCTGACACGGAGCAGGTG
GAGGCCGACCTGGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205260 protein sequence
Red=Cloning site Green=Tags(s)

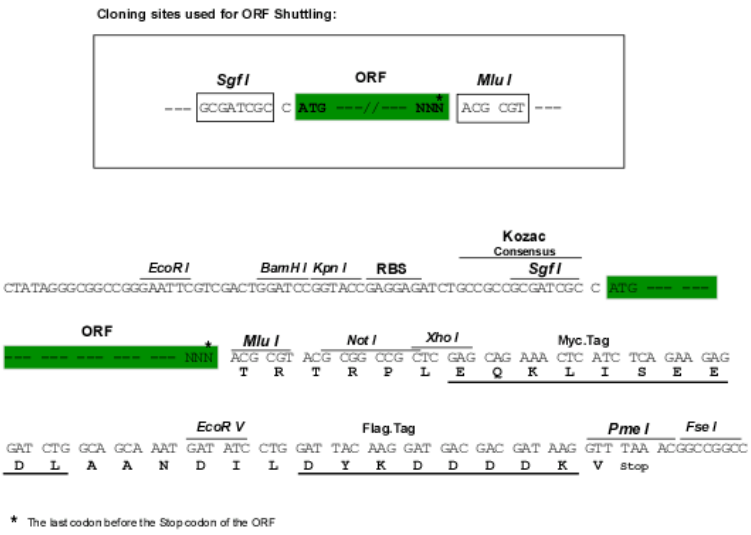
MNAMLETPELPAVFDGVKLAAVAAVLYVIVRCLNLKSPTAPPDLYFQDSGLSRFLLKSCPLLTKEYIPPL
IWGKSGHIQTALYGKMGRVRSPHPYGHRKFITMSDGATSTFDLFEPLAEHCVGDDITMVICPGIANHSEK
QYIRTFVDYAQKNGYRCAVLNHLGALPNIELTSPRMFTYGCTWEFGAMVNYIKKTYPLTQLVVVGFSLGG
NIVCKYLGETQANQEKVLCCVSVCQGYSALRAQETFMQWDQCQRFYNFLMADNMKKIILSHRQALFGDHV
KKPQSLEDTDLSRLYTATSLMQIDDNVMRKFHGYNSLKEYYEEESCMRYLHRIYVPLMLVNAADDPLVHE
SLLTIPKSLSEKRENVMFVLPLHGGHLGFFEGSVLFPEPLTWMDKLVVEYANAICQWERNKLQCSDTEQV
EADLE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6028_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007011

ORF Size: 1275 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_007011.2

RefSeq Size: 9159 bp

RefSeq ORF: 1278 bp

Locus ID: 11057

UniProt ID: P08910

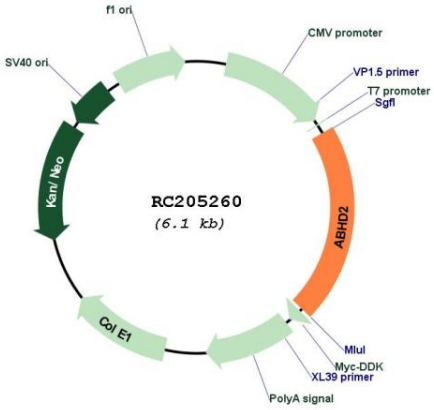
Cytogenetics: 15q26.1

Domains: abhydrolase

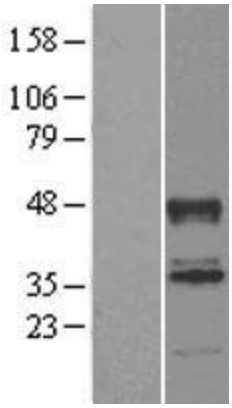
MW: 48.3 kDa

Gene Summary: This gene encodes a protein containing an alpha/beta hydrolase fold, which is a catalytic domain found in a wide range of enzymes. The encoded protein is an acylglycerol lipase that catalyzes the hydrolysis of endocannabinoid arachidonoylglycerol from the cell membrane. This leads to activation of the sperm calcium channel CatSper, which results in sperm activation. Alternative splicing of this gene results in two transcript variants encoding the same protein. [provided by RefSeq, Jan 2017]

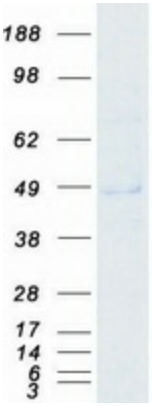
Product images:



Circular map for RC205260



Western blot validation of overexpression lysate (Cat# [LY402075]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205260 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ABHD2 protein (Cat# [TP305260]). The protein was produced from HEK293T cells transfected with ABHD2 cDNA clone (Cat# RC205260) using MegaTran 2.0 (Cat# [TT210002]).