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Product datasheet for RC205225

OGDHL (NM_018245) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	OGDHL (NM_018245) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OGDHL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC205225 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGTCAGCTGAGGCTGCTGCCGTCCCGTCTTGGGGTGCAGGCTGCGAGGCTCCTGGCTGCACATGACG
TCCCGGTGTTTGGCTGGCGCAGCAGGTCCTCCGGGCCACCGGCCACCTTCCCAAGCAGCAAAGGTGGAGG
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GACCTGGTCTGTTACCGCCGGCGTGGCCACAATGAGATGGACGAGCCCATGTTCACCCAGCTGCTCATGT
ACAAGCAGATCCACAGACAGGTGCCTGTGCTGAAGAAGTACGCAGACAAGCTGATTGCCGAGGGCACAGT

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CACCCTGCAGGAGTTTGAGGAAGAAATTGCCAAATACGACCGGATCTGTGAGGAGGCTTATGGCAGGTCC
AAGGATAAAAAGATTCTGCATATAAAGCACTGGTTGAACTCCCCCTGGCCTGGCTTCTTCAACGTAGATG
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205225 protein sequence
Red=Cloning site Green=Tags(s)

MSQLRLLPSRLGVQAARLLAAHDVPVFGWRSRSSGPPATFPSSKGGGGSSYMEEMYFAWLENPQSVHKSW
DSFFREASEEAFSGSAQPRPPSVVHESRSAVSSRTKTSKLVEDHLAVQSLIRAYQIRGHHVAQLDPLGIL
DADLDSFVPSDLITTIDKLAFYDLQEADLDKEFQLPTTTFIGGSENTLSLREIIRRLENTYCQHIGLEFM
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DMTKNRTVDWALAEYMAFGSLLKEGIHVRLSGQDVERGTFSHRHHVLHDQEVDRRTCVPMNHLWPDQAPY
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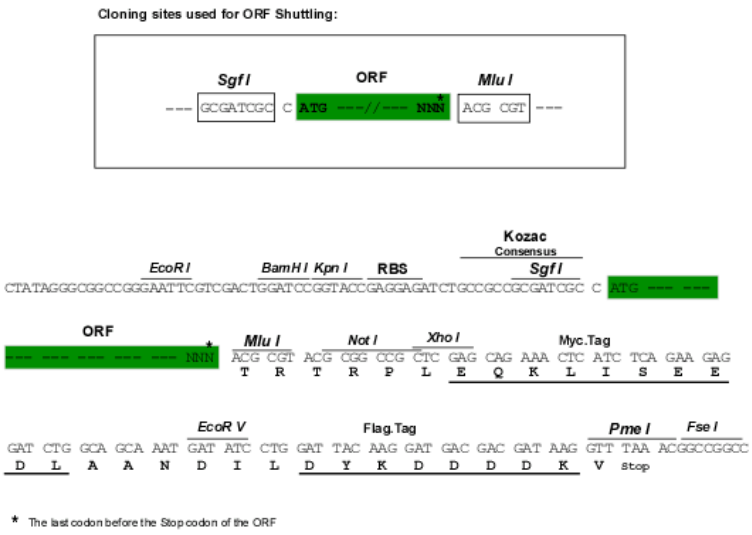
ATGNRNTHLVSLKKFLDTAFNLQAFEGKTF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6676_a12.zip

Restriction Sites: SgfI-MluI

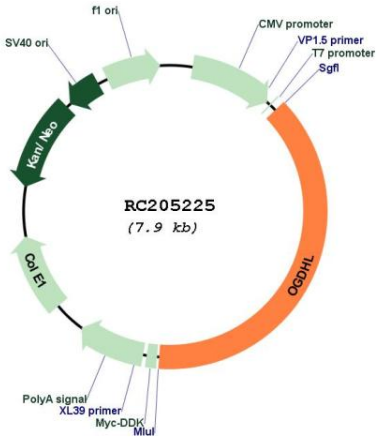
Cloning Scheme:



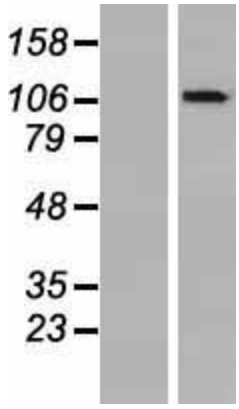
ACCN:	NM_018245
ORF Size:	3030 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_018245.3

RefSeq Size:	3774 bp
RefSeq ORF:	3033 bp
Locus ID:	55753
UniProt ID:	Q9ULD0
Cytogenetics:	10q11.23
Protein Pathways:	Citrate cycle (TCA cycle), Lysine degradation, Metabolic pathways, Tryptophan metabolism
MW:	114.5 kDa
Gene Summary:	The protein encoded by this gene is similar to oxoglutarate dehydrogenase (OGDH) of the OGDH complex, which degrades glucose and glutamate. This gene encodes several isoforms, including some that appear to localize to mitochondria. The encoded protein down-regulates the AKT signaling cascade and can suppress the growth of cervical cancer cells. [provided by RefSeq, Dec 2016]

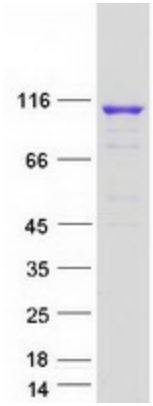
Product images:



Circular map for RC205225



Western blot validation of overexpression lysate (Cat# [LY413186]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205225 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified OGDHL protein (Cat# [TP305225]). The protein was produced from HEK293T cells transfected with OGDHL cDNA clone (Cat# RC205225) using MegaTran 2.0 (Cat# [TT210002]).