

Product datasheet for RC205324

ID2 (NM_002166) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ID2 (NM_002166) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ID2
Synonyms: bHLHb26; GIG8; ID2A; ID2H
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC205324 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAAAGCCTTCAGTCCCCTGAGGTCCGTTAGGAAAAACAGCCTGTCGGACCACAGCCTGGGCATCTCCC
 GGAGCAAAACCCCTGTGGACGACCCGATGAGCCTGCTATAACAACATGAACGACTGCTACTCCAAGCTCAA
 GGAGCTGGTGGCCAGCATCCCCAGAACAAGAAGGTGAGCAAGATGAAAATCCTGCAGCACGTCATCGAC
 TACATCTGGACCTGCAGATCGCCCTGGACTCGCATCCCCTATTGTGAGCCTGCATCACCAGAGACCCG
 GGCAGAACAGGGCTCCAGGACCGCTGACCACCCTCAACACGGATATCAGCATCTGCTTGCAGGC
 TTCTGAATTCCTTCTGAGTTAATGTCAAATGACAGCAAAGCACTGTGTGGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205324 protein sequence
 Red=Cloning site Green=Tags(s)

MKAFSPVRSVRKNSLSDHSLGISRSKTPVDDPMSLLYNMNDCYSKLKLVPISIPQNKVSKMEILQHVID
 YILDQLIALDSHPTIVSLHHQRPQGNQASRPLTTLNTDISILSLQASEFPSELSMNSDKALCG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6027_c09.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_002166

ORF Size: 402 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

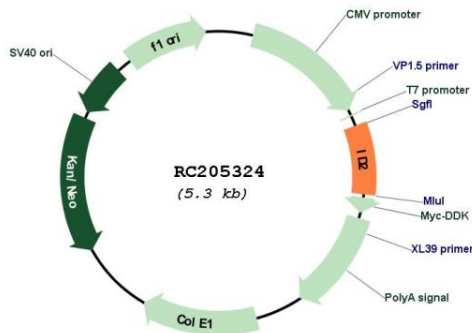
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

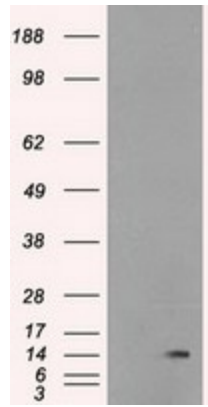
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_002166.5
RefSeq Size:	1402 bp
RefSeq ORF:	405 bp
Locus ID:	3398
UniProt ID:	Q02363
Cytogenetics:	2p25.1
Domains:	HLH
Protein Families:	ES Cell Differentiation/IPS, Stem cell relevant signaling - TGFb/BMP signaling pathway, Transcription Factors
Protein Pathways:	TGF-beta signaling pathway
MW:	14.9 kDa
Gene Summary:	The protein encoded by this gene belongs to the inhibitor of DNA binding family, members of which are transcriptional regulators that contain a helix-loop-helix (HLH) domain but not a basic domain. Members of the inhibitor of DNA binding family inhibit the functions of basic helix-loop-helix transcription factors in a dominant-negative manner by suppressing their heterodimerization partners through the HLH domains. This protein may play a role in negatively regulating cell differentiation. A pseudogene of this gene is located on chromosome 3. [provided by RefSeq, Aug 2011]

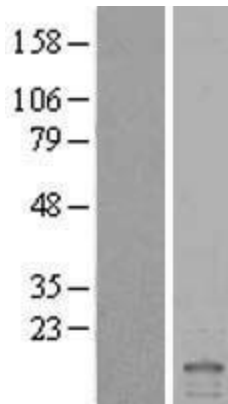
Product images:



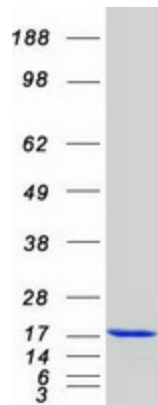
Circular map for RC205324



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ID2 (Cat# RC205324, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ID2(Cat# [TA500183]). Positive lysates [LY400786] (100ug) and [LC400786] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400786]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205324 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ID2 protein (Cat# [TP305324]). The protein was produced from HEK293T cells transfected with ID2 cDNA clone (Cat# RC205324) using MegaTran 2.0 (Cat# [TT210002]).