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Product datasheet for RC204170

ID4 (NM_001546) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ID4 (NM_001546) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ID4
Synonyms:	bHLHb27; IDB4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC204170 representing NM_001546
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGGCGGTGAGCCCGGTGCGCCCCTCGGGCCGCAAGGCGCCGTCGGGCTGCGGCGGCGGGGAGCTGG
CGCTGCGCTGCCTGGCCGAGCACGGCCACAGCCTGGGTGGCTCCGCAGCCGCGGCGGCGGCGGCGGCGGC
AGCGCGCTGTAAGGCGGCCGAGGCGGCGGCCGACGAGCCGGCGCTGTGCCTGCAGTGCGATATGAACGAC
TGCTATAGCCGCCTGCGGAGGCTGGTGCCCACCATCCCGCCCAACAAGAAAGTCAGCAAAGTGGAGATCC
TGCAGCACGTTATCGACTACATCCTGGACCTGCAGCTGGCGCTGGAGACGCACCCGGCCCTGCTGAGGCA
GCCACCACCGCCCGCGCCGCCACACCACCCGGCCGGGACCTGTCCAGCCGCGCCGCCGCGGACCCCGCTC
ACTGCGCTCAACACCGACCCGGCCGGCGCGGTGAACAAGCAGGGCGACAGCATTCTGTGCCGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204170 representing NM_001546
Red=Cloning site Green=Tags(s)

MKAVSPVRPSGRKAPSGCGGGELALRCLAEHGHSLGGSAAAAAAAAAARCKAAEAAADEPALCLQCDMND
CYSRLRRLVPTIPPNKKVSKVEILQHVIDYILDLQLALETHPALLRQPPPPAPPHHPAGTCPAAPPRTPL
TALNTDPAGAVNKQGDSILCR

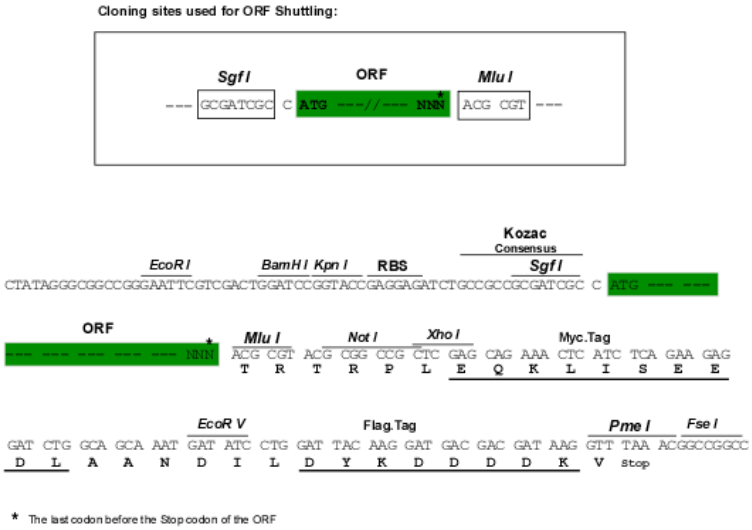
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2995_d03.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001546

ORF Size: 483 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_001546.4

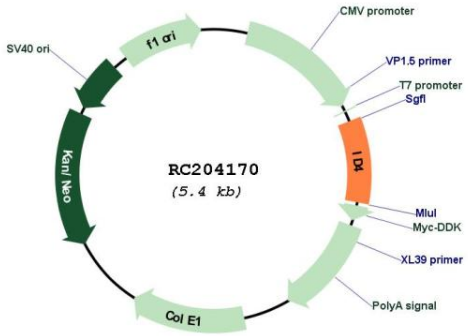
RefSeq Size: 2389 bp

RefSeq ORF: 486 bp

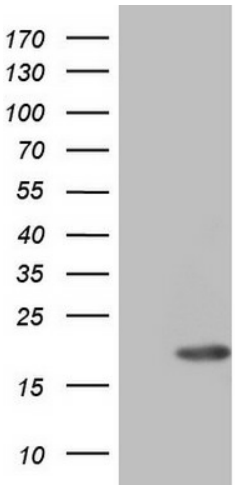
Locus ID: 3400

UniProt ID:	P47928
Cytogenetics:	6p22.3
Domains:	HLH
Protein Families:	ES Cell Differentiation/IPS, Transcription Factors
Protein Pathways:	TGF-beta signaling pathway
MW:	16.4 kDa
Gene Summary:	This gene encodes a member of the inhibitor of DNA binding (ID) protein family. The encoded protein lacks DNA binding ability, and instead regulates gene expression through binding to and inhibiting basic helix-loop-helix transcription factors. This protein has been implicated in the regulation of diverse cellular processes that play a role in development and tumorigenesis. [provided by RefSeq, Aug 2017]

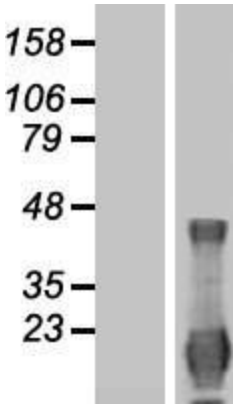
Product images:



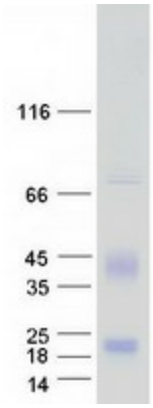
Circular map for RC204170



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ID4 (Cat# RC204170, 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-ID4(Cat# [TA804983]). Positive lysates [LY419876] (100ug) and [LC419876] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419876]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204170 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ID4 protein (Cat# [TP304170]). The protein was produced from HEK293T cells transfected with ID4 cDNA clone (Cat# RC204170) using MegaTran 2.0 (Cat# [TT210002]).