

Product datasheet for RC216502

IL24 (NM_006850) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IL24 (NM_006850) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IL24
Synonyms:	C49A; FISP; IL10B; MDA7; MOB5; ST16
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>NM_006850 ORF sequence, RC216502 may differ due to SNPs. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAATTTTCAACAGAGGCTGCAAAGCCTGTGGACTTTAGCCAGACCCTTCTGCCCTCCTTTGCTGGCG
ACAGCCTCTCAAATGCAGATGGTTGTGCTCCCTTGCCTGGGTTTTACCCTGCTTCTCTGGAGCCAGGTA
TCAGGGGCCAGGGCCAAGAATCCACTTTGGGCCCTGCCAAGTGAAGGGGGTTGTTCCCGAAGAACTG
TGGGAAGCCTTCTGGGCTGTGAAAGACTATGCAAGCTCAGGATAACATCAGAGTGCCCGCTGCTG
CAGCAGGAGTTCTGCAGAAGCTCTCGGATGCTGAGAGCTGTACCTTGCCACACCCTGCTGGAGTTC
TACTTGAAAAGTGTTCAAAACTACCACAATAGAACAGTTGAAGTCAGGACTCTGAAGTCATTCTCT
ACTCTGGCCAACAACTTTGTTCTCATCGTGTCAAACTGCAACCCAGTCAAGAAAATGAGATGTTTTCC
ATCAGAGACAGTGACACAGGCGGTTTCTGCTATTCCGGAGAGCATTCAAACAGTTGGACGTAGAAGCA
GCTCTGACCAAAGCCCTTGGGGAAGTGGACATTCTTCTGACCTGGATGCAGAAAATCTACAAGCTC
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Protein Sequence: >Peptide sequence encoded by RC216502
Blue=ORF Red=Cloning site Green=Tag(s)

```
MNFQQLQSLWTLARPFCPPLLATASQMQMVVLPCLGFTLLLWSQVSGAQGFHFHGPCQVKGVPQKL
WEAFWAVKDTMQAQDNITSARLLQQEVLQNVSDAESCYL VHTLLEFYLKT VFKNYHNRTVEVRTLKSFS
TLANNFVLIVSQLQPSQENEMF SIRDSAHRRFLFRFAFKQLDVEAALTKALGEVDILLTWMQKIFYKL
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
```

Recombinant protein using RC216502 also available, [TP316502M](#)

Restriction Sites: Sgfl-MluI



Cloning Scheme:


ACCN: NM_006850

ORF Size: 618 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_006850.3](#), [NP_006841.1](#)

RefSeq Size: 1976 bp

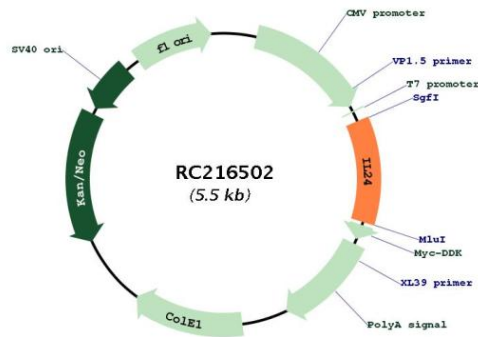
RefSeq ORF: 621 bp

Locus ID: 11009

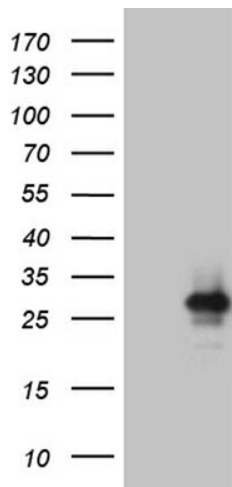
UniProt ID: [Q13007](#)
Cytogenetics: 1q32.1
Protein Families: Druggable Genome, Secreted Protein
Protein Pathways: Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway
MW: 23.8 kDa

Gene Summary: This gene encodes a member of the IL10 family of cytokines. It was identified as a gene induced during terminal differentiation in melanoma cells. The protein encoded by this gene can induce apoptosis selectively in various cancer cells. Overexpression of this gene leads to elevated expression of several GADD family genes, which correlates with the induction of apoptosis. The phosphorylation of mitogen-activated protein kinase 14 (MAPK7/P38), and heat shock 27kDa protein 1 (HSPB2/HSP27) are found to be induced by this gene in melanoma cells, but not in normal immortal melanocytes. Alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]

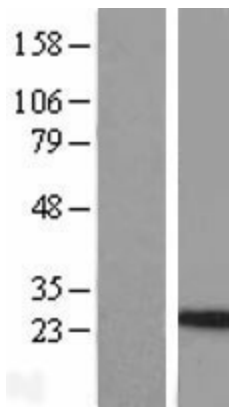
Product images:



Circular map for RC216502



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY IL24 (Cat# RC216502, 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-IL24 (Cat# [TA809390])(1:2000). Positive lysates [LY416383] (100ug) and [LC416383] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416383]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216502 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified IL24 protein (Cat# [TP316502]). The protein was produced from HEK293T cells transfected with IL24 cDNA clone (Cat# RC216502) using MegaTran 2.0 (Cat# [TT210002]).