

Product datasheet for RC218424

ING3 (NM_019071) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ING3 (NM_019071) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ING3
Synonyms:	Eaf4; ING2; MEAF4; p47ING3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218424 representing NM_019071 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTGTACCTAGAAGACTATCTGGAATGATTGAGCAGCTTCCTATGGATCTGCGGGACCGTTACGG
AAATGCGCGAGATGGACCTGCAGGTGCAGAATGCAATGGATCAACTAGAACAAAGAGTCAGTGAATTCCT
TATGAATGCAAAGAAAAATAACCTGAGTGGAGGGAAGAGCAAAATGGCATCCATCAAAAAGACTACTAT
AAAGCTTTGGAAGATGCAGATGAGAAGTTTCAGTTGGCAAACAGATATATGACTTGGTAGATCGACACT
TGAGAAAGCTGGATCAGGAAGTGGCTAAGTTTAAATGGAGCTGGAAGCTGATAATGCTGGAATTACAGA
AATATTAGAGAGGCGATCTTTGGAATTAGACACTCCTTCACAGCCAGTGAACAATCACCATGCTCATTCA
CATACTCCAGTGGAAAAAGGAAATATAATCCAACCTTCTCACCATACGACAACAGATCATATTCCTGAAA
AGAAATTTAAATCTGAAGCTCTTCTATCCACCCTTACGTCAGATGCCTCTAAGGAAAAATACACTAGGTTG
TCGAAATAATAATTCCACAGCCTCTTCTAACAATGCCTACAATGTGAATTCCTCCCAACCTCTGGGATCC
TATAACATTGGCTCGTTATCTTCAGGAAGTGGTGCAGGGGCAATTACCATGGCAGCTGCTCAAGCAGTTC
AGGCTACAGCTCAGATGAAGGAGGGACGAAGAATCAAGTTTAAAGCCAGTTATGAAGCATTTAAGAA
TAATGACTTTTCAGTTGGGAAAAGAATTTTCAATGGCCAGGAAACAGTTGGCTATTCATCATCTTCGGCA
CTTATGACAACATTAACACAGAATGCCAGTTCATCAGCAGCCGACTCACGGAGTGGTCAAGAGAGCAAAA
ACAACAACAAGTCTTCAAGCCAGCAGTCACTATCTTCTCCTCCTTCTTCTTCTTATCATCGTGTCTTTC
ATCATCAACTGTTGTACAAGAAATCTCTCAACAACAACACTGTAGTGCCAGAATCTGATTCAAATAGTCAG
GTTGATTGGACTTACGACCCAAATGAACCTCGATACTGCATTTGTAATCAGGTATCTTATGGTGAGATGG
TGGGATGTGATAACCAAGATTGCCCTATAGAATGGTTCCATTATGGCTGCGTTGGATTGACAGAGGCACC
AAAAGGCAAAATGGTACTGTCCACAGTGCCTGCTGCAATGAAGAGAAGAGGCAGCAGACACAAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC218424 representing NM_019071
Red=Cloning site Green=Tags(s)

MLYLEDYLEMIEQLPMDLRDRFTEMREMDLQVQNAMDQLEQRVSEFFMNAKKNKPEWREEQMASIKKDY
 KALEDADEKVLQANQIYDLVDRHLRKLQELAKFKMELEADNAGITEILERRSLELDTPSQPVNNHHAHS
 HTPVEKRKYNPTSHHTTDDHIPEKFKSEALLSTLTSKASKENTLGRNNNSTASSNNAYNVNSSQPLGS
 YNIGSLSSGTGAGAITMAAAQAVQATAQMKEGRRTSSLKASYEAFKNNDQFQLGKEFSMARETVGYSSSSA
 LMTTLTQNASSAADSRSGRKSKNNKSSSQSSSSSSSLSSCSSSTVVQEI SQQTTVPESDSNSQ
 VDWTYDPNEPRYCICNQVSYGEMVGCNDQDCPIEWFHYGCVGLTEAPKKGWYCPQCTAAMKRRGRHK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6503_a07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_019071

ORF Size: 1254 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_019071.3](#)

RefSeq Size: 2221 bp

RefSeq ORF: 1257 bp

Locus ID: 54556

UniProt ID: [Q9NXR8](#)

Cytogenetics: 7q31.31

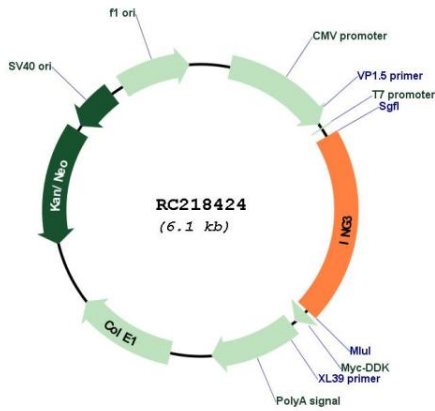
Domains: PHD

Protein Families: Druggable Genome, Transcription Factors

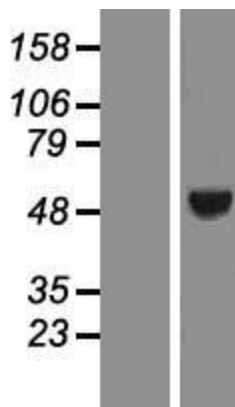
MW: 46.6 kDa

Gene Summary: The protein encoded by this gene is similar to ING1, a tumor suppressor protein that can interact with TP53, inhibit cell growth, and induce apoptosis. This protein contains a PHD-finger, which is a common motif in proteins involved in chromatin remodeling. This gene can activate p53 trans-activated promoters, including promoters of p21/waf1 and bax. Overexpression of this gene has been shown to inhibit cell growth and induce apoptosis. Allelic loss and reduced expression of this gene were detected in head and neck cancers. Two alternatively spliced transcript variants encoding different isoforms have been observed. [provided by RefSeq, Jul 2008]

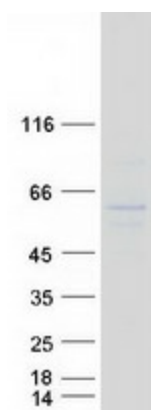
Product images:



Circular map for RC218424



Western blot validation of overexpression lysate (Cat# [LY412783]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218424 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ING3 protein (Cat# [TP318424]). The protein was produced from HEK293T cells transfected with ING3 cDNA clone (Cat# RC218424) using MegaTran 2.0 (Cat# [TT210002]).