

Product datasheet for RC202478

ING2 (NM_001564) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ING2 (NM_001564) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ING2
Synonyms:	ING1L; p33ING2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202478 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTAGGGCAGCAGCAGCAACTGTACTCGTCGGCTGCGCTCCTGACCGGGAGCGGAGCCGGCTGC
TCACCTGCTACGTGCAGGACTACCTTGAGTGCCTGGAGTCGCTGCCCCACGACATGCAGAGGAACGTGTC
TGTGCTGCGAGAGCTGGACAACAAATATCAAGAAACGTTAAAGGAAATTGATGATGTCTACGAAAAATAT
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GATTCAGCCAACCGAAAGATCTTCAAGAAGACCCCGCAGGCAGCGGACCAGTGAAGCCGTGATTTAT
GTCACATGGCAAAATGGGATTGAAGACTGTGATGATCAGCCACCTAAAGAAAAAGAAATCCAAGTCAGCAAA
GAAAAAGAAACGCTCCAAGGCCAAGCAGGAAAGGGAAGCTTACCTGTTGAGTTTGCAATAGATCCTAAT
GAACCTACATACTGCTTATGCAACCAAGTGTCTTATGGGAGATGATAGGATGTGACAATGAACAGTGTC
CAATTGAATGGTTTCACTTTTTCATGTGTTTCACTTACCTATAAACCAAGGGGAAATGGTATTGCCCAA
GTGCAGGGGAGATAATGAGAAAAAATGGACAAAAGTACTGAAAAGACAAAAAGGATAGAAGATCGAGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC202478 protein sequence
 Red=Cloning site Green=Tags(s)

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MLGQQQQQLYSSAALLTGERSRLTLCYVQDYLECVELPHDMQRNVSVLRELDNKYQETLKEIDDVYEKY
KKEDDLNQQKRLQQLLQRALINSQELGDEKIQIVTQMLELVENRARQMELHSQCFQDPAESERASDKAKM
DSSQPERSRRRPRRQRTSESRDLCHMANGIEDCDDQPPKEKKSASAKKKRKSQKQEREASPVVEFAIDPN
EPTYCLCNQVSYGEMIGCDNEQCPIEWFHFSCVSLTYKPKGKWYCPKCRGDNEKTMDKSTKTKKDRRSR
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6064_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001564

ORF Size: 840 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_001564.4](#)

RefSeq Size: 2465 bp

RefSeq ORF: 843 bp

Locus ID: 3622

UniProt ID: [Q9H160](#)

Cytogenetics: 4q35.1

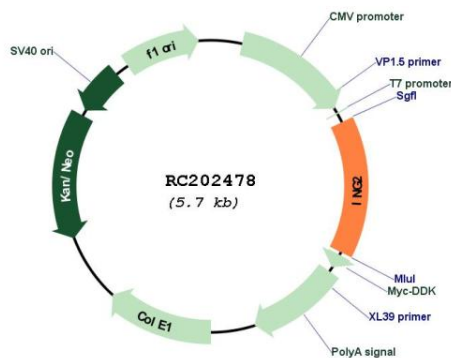
Domains: PHD

Protein Families: Druggable Genome, Transcription Factors

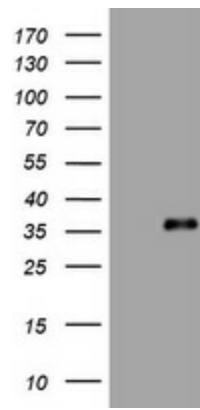
MW: 32.8 kDa

Gene Summary: This gene is a member of the inhibitor of growth (ING) family. Members of the ING family associate with and modulate the activity of histone acetyltransferase (HAT) and histone deacetylase (HDAC) complexes and function in DNA repair and apoptosis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]

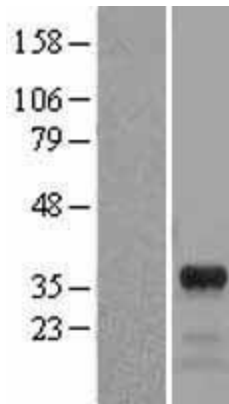
Product images:



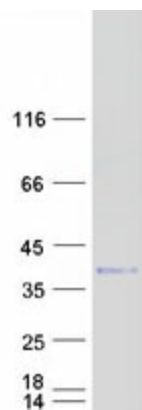
Circular map for RC202478



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ING2 (Cat# RC202478, 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-ING2 (Cat# [TA800661]). Positive lysates [LY419856] (100ug) and [LC419856] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419856]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202478 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ING2 protein (Cat# [TP302478]). The protein was produced from HEK293T cells transfected with ING2 cDNA clone (Cat# RC202478) using MegaTran 2.0 (Cat# [TT210002]).