

Product datasheet for **RC201147**

NFkB p100 / p52 (NFKB2) (NM_001077493) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NFkB p100 / p52 (NFKB2) (NM_001077493) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NFkB p100 / p52
Synonyms:	LYT-10; LYT10; p52
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC201147 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGAGTTGCTACAACCCAGGCTCGGATGGTATTATTGAATATGATGATTTCAAATTGAACTCCTCCA
TTGTGGAACCCAAGGAGCCAGCCCCAGAAACAGCTGATGGCCCTACCTGGTGATCGTGGAAACAGCCTAA
GCAGAGAGGCTTCCGATTTTCGATATGGCTGTGAAGGCCCTCCCATGGAGGACTGCCCGGTGCCTCCAGT
GAGAAGGGCCGAAAGACCTATCCCACTGTCAAGATCTGTAACACGAGGGACCAGCCAAGATCGAGGTGG
ACCTGGTAACACACAGTGACCCACCTCGTGCTCATGCCACAGTCTGGTGGCAAGCAATGCTCGGAGCT
GGGGATCTGCGCCGTTTCTGTGGGGCCCAAGGACATGACTGCCCAATTTAAACCTGGGTGTCTGCAT
GTGACTAAGAAGAACATGATGGGACTATGATACAAAACTTACAGAGGCAGCGGCTCCGCTCTAGGCCCC
AGGGCCTTACGGAGGCCGAGCAGCGGGAGCTGGAGCAAGAGGCCAAAGAAGTGAAGAAGGTGATGGATCT
GAGTATAGTGCAGCTGCGCTTCTCTGCCTCCTTAGAGCCAGTATGGCTCCTTCTCCCTGCCCTGAAG
CCAGTCATCTCCAGCCCATCCATGACAGCAAATCTCCGGGGGCATCAAACCTGAAGATTTCTCGAATGG
ACAAGACAGCAGGCTCTGTGCGGGTGGAGATGAAGTTTATCTGCTTTGTGACAAGTGCAGAAAGATGA
CATTGAGGTTTCGGTTCTATGAGGATGATGAGAATGGATGGCAGGCCTTTGGGGACTTCTCTCCACAGAT
GTGCATAAACAGTATGCCATTGTGTTCCGGACACCCCTTATCACAAGATGAAGATTGAGCGGCCTGTAA
CAGTGTCTGCAACTGAAACGCAAGCGAGGAGGGGACGTGTCTGATTCCAAACAGTTACCTATTACCC
TCTGGTGAAGACAAGGAAGAGGTGCAGCGAAGCGGAGGAAGGCCTTGCCACCTTCTCCAGCCCTTC
GGGGTGGCTCCACATGGGTGGAGCTCTGGGGTGCAGCCGGGGCTACGGAGGAGCTGGAGGAGGTG
GCAGCTCGGTTTCTTCCCTCCTCCTGGCTACAGCCCTACCAGTCCGGCGCGGGCCCATGGGCT
CTACCCGGGAGGCGGGGGCGGGCGCAGATGGCCGCCACGGTGCCAGCAGGGACTCCGGGGAGGAAGCC
GCGGAGCCGAGCGCCCTCCAGGACCCCAAGTGCAGCCGCGAGGCCCGGAGATGCTGCAGCGAGCTC
GAGAGTACAACGCGCGCTGTTGCGCTGGCGCAGCGCAGCGCCGAGCCCTACTCGACTACGGCTCAC
CGCGGACGCGCGCGCTGCTGGCGGGACAGCGCCACCTGCTGACGGCGCAGGACGAGAACGGAGACACA
CCACTGCACCTAGCCATCATCCACGGGCAGACCAGTGTGATTGAGCAGATAGTCTATGTCATCCACCAG
CCCAGGACCTCGGCGTTGTCAACCTCACAACCACTGCACCAGACGCCCTGCACCTGGCGGTGATCAC
GGGCAGACGAGTGTGGTGAAGTCTGCTGCGGGTAGGTGCAGCCAGCTCTGCTGGATCGGCATGGA
GACTCAGCATGCATCTGGCGTGGGGCAGCGCTGGTCTCCTGAGCTGCTGCGTGCAGTCTCAGA
GTGGAGCTCCTGCTGTGCCCAGCTGTTGCATATGCCTGACTTTGAGGGACTGTATCCAGTACACCTGGC
GGTCCGAGCCGAAGCCCTGAGTGCCTGGATCTGCTGGTGGACAGTGGGGCTGAAGTGGAGGCCACTGAG
CGGCAGGGGGGACGAACAGCCTTGCATCTAGCCACAGAGATGGAGGAGCTGGGGTTGGTACCCATCTGG
TCACCAAGCTCCGGGCCAACGTGAACGCTCGCACCTTTGCGGAAACACACCCCTGCACCTGGCAGCTGG
ACTGGGTACCCGACCCTCACCCGCTCCTTCTGAAGGCTGGTGTGACATCCATGCTGAAAACGAGGAG
CCCCTGTGCCACTGCCTTACCCCTACCTCTGATAGCGACTCGGACTCTGAAGGGCTGAGAAGGACA
CCCGAAGCAGCTTCCGGGGCCACAGCCTTGTGACCTCACTTGCAGCACAAGGTGAAGACCTTGTGCT
AAATGCTGCTCAGAACACCATGGAGCCACCCCTGACCCCGCCAGCCAGCAGGGCCGGGACTGTCACTT
GGTGATACAGCTCTGCAGAACCTGGAGCAGCTGCTAGACGGGCCAGAAGCCAGGGCAGCTGGGAGAGC
TGGCAGAGCGTCTGGGGTGCAGCAGCTGGTAGACACGTACCGACAGACAACCTACCCAGTGGCAGCCT
CCTGCGCAGTACGAGCTGGCTGGCGGGGACCTGGCAGGTCTACTGGAGGCCCTGTCTGACATGGGCCTA
GAGGAGGGAGTGAAGCTGCTGAGGGTCCAGAAACCCGAGACAAGCTGCCAGCAGAGGTGAAGGAAG
ACAGTGCCTACGGGAGCCAGTCACTGGAGCAGGAGGCAGAGAAGCTGGGCCACCCCTGAGCCACCAG
AGGGCTCTGCCACGGGCACCCCAAGCCTCAGGTGCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201147 protein sequence
 Red=Cloning site Green=Tags(s)

MESCYNPLDGIIEYDDFKLNSSIVEPKPEPETADGPYLVIVEQPKQGRFRFRYGCEGPSHGGLPGASS
 EKGRKTYPTVKICNYEGPAKIEVDLVTHSDPPRAHSLVGKQCSELGICAVSVGPKDMTAQFNNLGV LH
 VTKNMMGTMIQKLQRQLRSRPGQLTEAEQRELEQEAKELKKVMDLSIVRLRFSAFLRASDGSFSLPLK
 PVISQPIHDSKSPGASNLKISRMDKTAGSVRGGDEVYLLCDKVQKDDIEVRFYEDDENGWQAFGDFSP TD
 VHKQYAIVFRTPPYHKMKIERPVTVFLQLKRKRGGDVSDSKQFTYYPLVEDKEEVQRKRKALPTFSQPF
 GGGSHMGGGSGGAAGGYGAGGGGSLGFFPSSLAYSQYQSGAGPMGCYPGGGGGAQAATVPSRDSGEEA
 AEPSPSRTPQCEPQAPPEMLQRAREYNARLFGLAQRSARALLDYGV TADARALLAQORHLLTAQDENGDT
 PLHLAIIHGQTSVIEQIVYVIHHAQDLGVVNL TNHLHQTPHLAVITGQTSVVSFLLRVGADPALLDRHG
 DSAMHLALRAGAGAPPELLRALLQSGAPAVPQLLHMPDFEGLYPVHLAVRARSPECLDLLVDSGAEVEATE
 RQGRTALHLATEMEELGLVTHLVTKLRANVNARTFAGNTPLHLAAGLYPTLTRLLKAGADIHAENEE
 PLCPLPSPTSDSDSDSEGPEKDRSSFRGHTPLDLTCSTKVKTLLL NAAQNTMEPPLTPPSPAGPGLSL
 GD TALQNL EQLLDGPEAQGSWAELAERLGLRSLVD TYRQTTSPSGSL LRSYELAGDLAGLLEALSDMGL
 EEGVRLLRGPETRDKLPSTEVKEDSAYGSQSVEQEA EKLGPPEPPGGLCHGHPQPQVH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6205_c02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

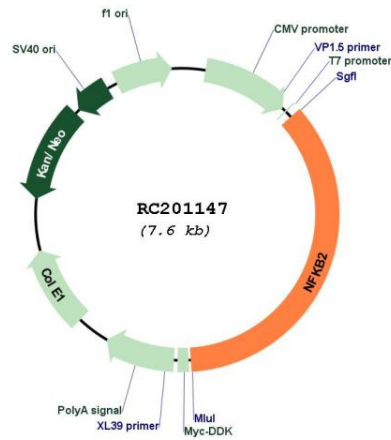


* The last codon before the Stop codon of the ORF

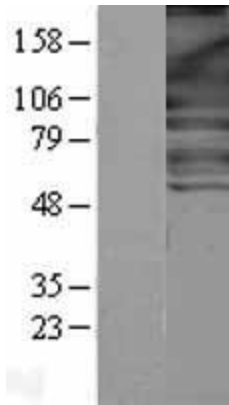
ACCN: NM_001077493

ORF Size:	2697 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:	<ol style="list-style-type: none">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_001077493.1 , NP_001070961.1
RefSeq Size:	3416 bp
RefSeq ORF:	2699 bp
Locus ID:	4791
Cytogenetics:	10q24.32
Protein Families:	Transcription Factors
Protein Pathways:	MAPK signaling pathway, Pathways in cancer
MW:	96.7 kDa
Gene Summary:	This gene encodes a subunit of the transcription factor complex nuclear factor-kappa-B (NFkB). The NFkB complex is expressed in numerous cell types and functions as a central activator of genes involved in inflammation and immune function. The protein encoded by this gene can function as both a transcriptional activator or repressor depending on its dimerization partner. The p100 full-length protein is co-translationally processed into a p52 active form. Chromosomal rearrangements and translocations of this locus have been observed in B cell lymphomas, some of which may result in the formation of fusion proteins. There is a pseudogene for this gene on chromosome 18. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2013]

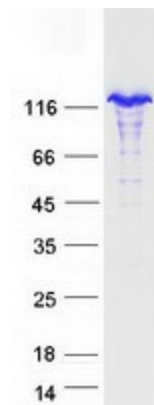
Product images:



Circular map for RC201147



Western blot validation of overexpression lysate (Cat# [LY400895]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC213313] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NFKB2 protein (Cat# [TP301147]). The protein was produced from HEK293T cells transfected with NFKB2 cDNA clone (Cat# RC201147) using MegaTran 2.0 (Cat# [TT210002]).