

Product datasheet for **MG222337**

Birc3 (NM_007464) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Birc3 (NM_007464) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Birc3
Synonyms:	Api1; Api2; AW107670; Birc2; C-IAP2; cIAP-1; cIAP-2; cIAP1; cIAP2; HIAP2; IAP1; IAP2; MIAP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG222337 representing NM_007464
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAACATGGTTCAAGACAGCGCTTTCTAGCCAAGCTGATGAAGAGTGTGACACCTTTGAGTTGAAGT
 ATGACTTTTCTGTGAGCTGTACCGATTGTCCAGTATTAGCTTTTCCAGGGAGTTCCTGTGTGAGA
 AAGGAGTCTGGCTCGTGTCTGGCTTTTACTACACTGGTCCAATGACAAGGTCAAGTGCTTCTGCTGTGGC
 CTGATGCTAGACAAGTGGAAACAAGGGACAGTCCCATGGAGAAGCACAGAAAGTTGTACCCAGCTGCA
 ACTTTGTACAGACTTTGAATCCAGCCAACAGTCTGGAAGCTAGTCTCGGCCCTTCTCTCTCCACGGC
 GATGAGCACCATGCCTTTGAGCTTTGCAAGTCTGAGAATACTGGCTATTTAGTGGCTCTTACTCGAGC
 TTTCCCTCAGACCCTGTGAATCCGAGCAAATCAAGATTGTCTGCTTTGAGCACAAGTCCCTACCACT
 TTGCAATGAACACAGAGAAGGCCAGATTACTCACCTATGAAACATGGCCATTGTCTTTTCTGTACCAGC
 AAAGCTGGCCAAAGCAGGCTTCTACTACATAGGACCTGGAGATAGAGTGGCTGCTTTGCGTGCATGGG
 AAAGTGAACACTGGGAACGTAAGGATGATGCTATGTCAGAGCACCAGAGGCATTTCCCAAGCTGTCCGT
 TCTAAAAGACTTGGGTGAGTCTGCTTCGAGATACACTGTCTTAACTGAGCATGCAGACACACGAGC
 CCGTATTAGAATTCTTAAGTGGCTTCTAGTGCAGTGTTCATTCCAGGAAGTTGCAAGTGGGGC
 TTTTATTATACAGGACACAGTGTGATGTAAGTGTGTTTGTGTGATGGTGGGCTGAGGTGCTGGGAAT
 CTGGAGATGACCCTGGGTGGAACATGCCAAGTGGTTTCCAAGGTGTGAGTACTTGTCTCAGAATCAAAGG
 CCAAGAATTTGTAGCAAGTCAAGCTGGCTATCCTCATCTACTGAGCAGCTATTATCTACGTCAGAC
 TCCCAGAAAGATGAGAATGCAGACGCAGCAATCGTGCAATTTGGCCCTGGAGAAAGTTCGGAAGATGTCG
 TCATGATGAGCAGCCTGTGGTTAAAGCAGCCTTGGAAATGGGCTCAGTAGGAGCCTGGTGAGACAGC
 GGTTCAAGTGGCAGATCCTGGCCACTGGTGAAGTGAAGTACAGGACCTCAGTACCTCGTTATAGGCTTACTC
 GATGCAGAAGACGAGATGAGAGAGGAGCAGATGGAGCAGGCGGCCGAGGAGGAGGAGTCAAGTATCTAG
 CACTAATCCGGAAGAACAAAATGGTGTCTTTCCAACATTTGACGTGTGTGACACCAATGTGTATTGCC
 CCTAAGTGAAGGGCCATCACTGAACAGGAGTGAATGCTGTGAAACAGAAACCACACCTTACAAGCA
 AGCACACTGATTGATACTGTGTTAGCAAAAGGAAACACTGCAGCAACCTCATTGAGAACTCCCTTCGGG
 AAATTGACCTGCGTTATACAGAGATATATTTGTGCAACAGGACATTAGGAGTCTCCACAGATGACAT
 TGCAGCTCTACCAATGGAAGAACAGTTGCGGAACTCCAGGAGGAAAGAATGTGTAAGTGTGTATGGAC
 CGAGAGGTATCCATCGTGTTCATCCCTGTGGCCATCTGGTGTGTGCAAAAGACTGCGCTCCCTCTCTGA
 GGAAGTGTCCATCTGTAGAGGGACCATCAAGGGCACAGTGCACATTTCTCTCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG222337 representing NM_007464
 Red=Cloning site Green=Tags(s)

MNMVQDS AFLAKLMKSADTFELKYDFSCELYRLSTYSAFPVPRGVPVRSRLARAGFYTGANDKVKCFCCG
 LMLDNWQDQSPMEKHKRLYPSCNFVQTLNPNANLEASPRPSLPSTAMSTMPLSFASSENTGYFSGSYSS
 FPSDPVNFNANQDCPALSTSPYHFAMNTEKARLLTYETWPLSFLSPAKLAKAGFYIYIGPDRVACFACDG
 KLSNWERKDDAMSEHQRFHFPSCPFKLDLQGSASRYTVSNLSMQTHAARIRTFSNWPSSALVHSQELASAG
 FYYTGHSDDVKCFCCDGLRCWESGDDPWVEHAKWFPCEYLLRIKQEFVSQVQAGYPHLLLEQLLSTSD
 SPEDENADAAIVHFGPGESEDDVMMSTPVVKAALVEMGF SRSLVRQTVQWQILATGENYRTVSDLVIGLL
 DAEDEMREEQMEQAAEEEEESDDLALIRKNMVLVQHLTCVTPMLYCLLSARAITEQECNAVQKQPHLQA
 STLIDTVLAKGNTAATSFNLSLREIDPALYRDI FVQQDIRSLPTDDIAALPMEEQLRKLQEERMCKVCM
 REVSIVFIPCGLVVKDCAPSLRKCPICRGTIKGTVRFTLS

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_007464

ORF Size: 1806 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_007464.3](#), [NP_031490.2](#)

RefSeq Size: 2820 bp

RefSeq ORF: 1809 bp

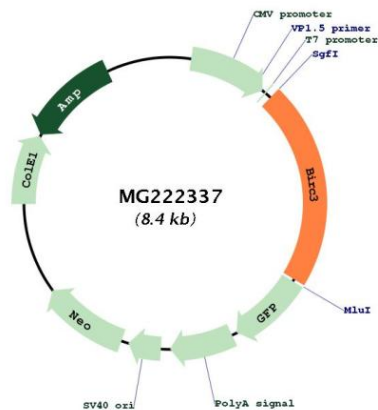
Locus ID: 11796

UniProt ID: [O08863](#)

Cytogenetics: 9 A1

Gene Summary:

Multi-functional protein which regulates not only caspases and apoptosis, but also modulates inflammatory signaling and immunity, mitogenic kinase signaling and cell proliferation, as well as cell invasion and metastasis. Acts as an E3 ubiquitin-protein ligase regulating NF-kappa-B signaling and regulates both canonical and non-canonical NF-kappa-B signaling by acting in opposite directions: acts as a positive regulator of the canonical pathway and suppresses constitutive activation of non-canonical NF-kappa-B signaling. The target proteins for its E3 ubiquitin-protein ligase activity include: RIPK1, RIPK2, RIPK3, RIPK4, CASP3, CASP7, CASP8, IKBKE, TRAF1, and BCL10. Acts as an important regulator of innate immune signaling via regulation of Toll-like receptors (TLRs), Nodlike receptors (NLRs) and RIG-I like receptors (RLRs), collectively referred to as pattern recognition receptors (PRRs). Protects cells from spontaneous formation of the ripoptosome, a large multi-protein complex that has the capability to kill cancer cells in a caspase-dependent and caspase-independent manner. Suppresses ripoptosome formation by ubiquitinating RIPK1 and CASP8.[UniProtKB/Swiss-Prot Function]

Product images:

Circular map for MG222337