

## Product datasheet for **MG221149**

### Erc1 (NM\_053204) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Erc1 (NM_053204) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Erc1
Synonyms:	4930404L01Rik; 5033405M01Rik; 9630025C19Rik; B430107L16Rik; CAST2; ELKS; Elks1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG221149 representing NM_053204 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTATGGAAGTGCATCGATCAGTAGGGAAGGTGGAACCAAGCAGCCAGAGTCCTGGGCGATCACCTCGGC  
TTCCTCGTCCCCTCGCTTAGGTCATCGGCAACAAATAGTACAGGAGGGAGTCTGAAACAGTGTGG  
AGGTGGCAGTGGAAAACCCCTTCAATGGAGAATATACAGTCCTAAATGCTGCCTATGCTACATCTGGC  
CCTATGTACCTAAGTGACCATGAAAACGTGGGTGCAGAAACACCTAAAAGCACCATGACACTTGGCCGTT  
CTGGGGACGCTTGCCTACGGTGTAGGATGACTGCTATGGGCAGTAGCCCAACATAGCAAGCAGTGG  
GGTTGCTAGTGATACCATAGCATTGGGAGAACATCACCTCCCTCCTGTTAGTATGGCATCTACTGTACCT  
CACTCTCTTCGTCAGGCAAGAGATAACACCATCATGGATCTGCAGACACAGCTGAAGGAAGTATTAAGAG  
AAAACGATCTTTTGGGAAAAGATGTGGAAGTAAAGGAGAGCAAATTAAGTTCATCAATGAATAGTATCAA  
GACCTTCTGGAGCCCAGAGTTAAAGAAAAGAGCGGGCCTTGAGAAAAGATGAAGCTTCCAAAATCACCATT  
TGGAAGGAGCAGTACCGAGTTGTACAGGAGGAAAACAGCACATGCAGATGACAAATCCAGGCTCTCCAGG  
ATGAGCTGCGGATCCAGAGGGACTTGAATCAGCTGTTTCAGCAAGATAGCAGCAGTAGGACTGGGGAGCC  
TTGCGTGGCAGAGCTCACAGAGGAGAATTCCAGAGGCTGCATGCTGAGCAGGAGGCAAGCCAAAAGAG  
CTGTTTCTCTGCGGAAGACCCTGGAGGAAATGGAGCTGAGGATTGAGACTCAGAAGCAGACCCTAAATG  
CTCGGGATGAGTCCATCAAGAAGCTTCTGGAGATGCTCCAGAGCAAAGGACTTTCTGCCAAAGCTACAGA  
GGAAGACCATGAGAGAACGCGACGGCTCGCAGAGGCGGAGATGCACGTCACCACCTCGAGAGTCTTTTG  
GAGCAGAAGGAAAAAGAGAATAATATGTTGAGAGAGGAGATGCACCGGAGATTTGAAAATGCCCTGATT  
CTGCCAAGACAAAAGCCTTGCAAACTGTTATTGAAATGAAGGATTCAAAATTTCTTCCATGGAGCGTGG  
GCTCCGAGACCTGGAAGAGGAAATTCAGATGCTGAAGTCAAATGGGGCTTTGAGTAGTGAGGAGCGGGAG  
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GATTGGCCAGGTGAAACAGGAAGTGTCCAGAAAGGACACAGAATTACTAGCCTTACAACAAAGCTAGAA



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ACTCTACGAACCAATTCTCAGACAGTAAGCAACATATTGAGGTGCTGAAAGAGTCCCTCACTGCTAAGG  
 AGCAAAGGGCTGCCATCCTACAGACTGAGGTGGATGCTCTTCGATTGCGTTTGAAGAAAAAGACTAT  
 GCTGAATAAAAAACCAAGCAATCCAAGATATGGCTGAGGAGAAGGGCACCCAGGCTGGAGAGATCCAT  
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 CACCATAACACAGACACAGCTCTGACAACCTTTGGAGGAGGCTCTGCAGATAAAGAACGGACAATTGAA  
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 AAAGTTGTATATTGGACACCTGACAGCCCTCTGCCATGACCGAGACCCCTTAATCCTCCGTGGACTACT  
 CCACCAGTCTTATAATGCAGATGGTGAAGCAGGAGCTTGGGAGAATGAGCTGCAGAAGATGACTCAGG  
 AGCAGCTTCAAGACGAGTTGGAGAAAGTTGAAGGGGACAACGCCGAGCTGCAGGAGTTTGCACACCAT  
 TCTCCAGCAGATAGCCGATCACTGCCCTGACATCTCGAACAAGTGGTCAATGCCCTGGAAGAGTCTCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG221149 representing NM\_053204  
 Red=Cloning site Green=Tags(s)

MYGSARSVGKVEPSSQSPGRSPRLPRSPRLGHRRTNSTGGSSGNSVGGGSGKTLSMENIQLNAAAYATSG  
 PMYLDHENVGAETPKSTMTLGRSGGRLPYGVRMTAMGSSPNIIASSGVASDTIAFGEHLLPPVSMASSTVP  
 HSLRQARDNTIMDLQTQLKEVLRENDLLRKDVEVKESKLSMNSIKTFWSPELKKERALRKDEASKITI  
 WKEQYRVVQEEHQHMOMTIQALQDELRIQRDLNQLFQQDSSSRTGEPVAVELTEENFQRLHAEHERQAKE  
 LFLLRKTL EEMELRIETQKQTLNARDESIIKLL EMLQSKGL SAKATEEDHERTRRLAEAEEMHVHLESLL  
 EQKEKENNMLREEMHRRFENAPDSAKTKALQTVIEMKDSKISSMERGLRDLEEEIQMLKSNAGLSSEERE  
 EEMKQMEVYRSHSKFMKNKVEQLKEELSSKDAQGEELKKRAAGLQSEIGQVKQELSRKDTELLALQTKLE  
 TLTNQFSDSKQHIEVLKESLTAKEQRAAILQTEVDALRLLEEKETMLNKKTKQIQDMAEEKGTQAGEIH  
 DLKMDLDVKERKVNVLQKKIENLQEQLRDKEKQMSLKERVKSLQADTTNTDTALTTLEEALADKERTIE  
 RLKEQRDRDEREKQEEIDTYKKDLKDLREKVSLLQGDSEKEASLLDIKEHASSLASSGLKKDSRLKLE  
 IALEQKKEECLKMESQLKKAHEATLEARASPEMSDRIQQLEREISRYKDESSKAQTEVDRILLEILKEVEN  
 EKNDKDKKIAELESLSRQVQDQNKVANLKHKEQVEKKKSAQMLEEARREDSDSSQQLQDSLKKD  
 DRIEELEALRESVQITAEREMVLAQEEASARTNAEKQVEELLMAMEKVKQELSMKAKL SSTQQSLAEKE  
 THLTNLRARRKHLEEVLEMKQEAALLAISEKDANIALLELSSSKKKTQEEVAALKREKDRLVQQLKQQT  
 QNRMKLMADNYEDDHFSSRSNTNHPKSPDQIIQPLLELDQNRSKLKL YIGHLTALCHDRDPLILRGLT  
 PPASYNADGEQAAWENELQKMTQEQLQNELEKVEGDNAELQEFANTILQQIADHCPDILEQVVNALEESS

TRTRPLE – GFP Tag – V

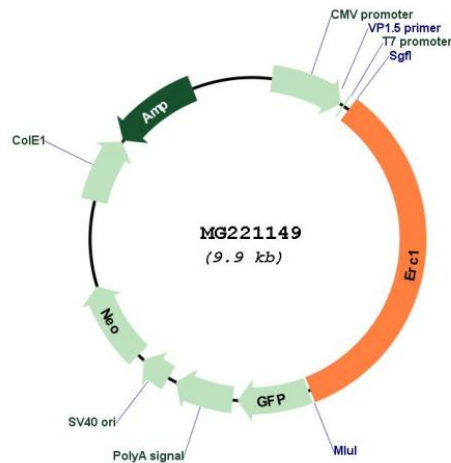
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_053204

ORF Size: 3360 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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_053204.2, NP_444434.2</u>
<b>RefSeq Size:</b>	8760 bp
<b>RefSeq ORF:</b>	3363 bp
<b>Locus ID:</b>	111173
<b>Cytogenetics:</b>	6 F1
<b>Gene Summary:</b>	Regulatory subunit of the IKK complex. Probably recruits I $\kappa$ B $\alpha$ /NF $\kappa$ B1 to the complex (By similarity). May be involved in the organization of the cytomatrix at the nerve terminals active zone (CAZ) which regulates neurotransmitter release. May be involved in vesicle trafficking at the CAZ. May be involved in Rab-6 regulated endosomes to Golgi transport.[UniProtKB/Swiss-Prot Function]