

## Product datasheet for MR216075

### Calcoco2 (NM\_029755) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Calcoco2 (NM_029755) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Calcoco2
Synonyms:	2410154J16Rik; C77254; Ndp52; Ndp52l1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR216075 representing NM_029755 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACCAGTGCCCCATACCTACCTTGCTGGAACATGGCAACTTCTCTCAGGTCCTGTTTAACAATGTGG  
AGAAGTCTATGCTCCTAGAGGAGATATCATGTGCTATTACACCCTCACTGAAAAGTTCATCCCTCGACG  
CAAGGACTGGATTGGCATCTTTAAAGTAGGGTGAAGACCACTCAGGAGTATTATACCTTCATGTGGCT  
CCCTTGCCAAAAGACAAAACAAGGATTCAGCCACACAGCAGGAAATCCAATTCAAAGCTTATTACCTC  
CCAAGGATGTGGAGCGCTACCAGTCTGCTATGTGGATGAAGATGGTTTAGTCCGGGGAACAAGTGTCCC  
TTTCCAGTTTTGTCCAGACCCTGACGAGGACATAATGGTTGTTATCAATAAGGAAAAGGTAGAAGAGATG  
GAACAGCTCAGTGAGGAGCTTTACCAACAAAACCAGGAGCTGAAAGACAAGTACGCTGACCTCCATGAGC  
AGCTACAGAGGAAGCAGGTGGCACTGGAAGCAACACAGAGGGTCAATAAGACCTTAGAACACAAAGTGA  
AGAGAAGGCCTCCTGGGAGAAAGAGAAGGCCTCCTGGGAGGAAGAGAAGGCCTCCTGGGAGGAAGAGA  
GCCTCCTGGGAGGAAGAGAAGGCCTCCTGGGAGGAAGAGAAGGCCTCCTGGGAGGAAGAGAAGGCCTCCT  
GGGAGGAAGAGAAGGCCTCCTGGGAGGAAGAGAAGGCCTCCTGGGAGGAAGAGAAGGCCTCCTGGGAGGA  
AGAGAAGGCCTCCTGGGAGGAAGAGAAGGCCTCCTGGGAGAAAGAGAAGGCCTCCTGGGAGGAAGAGAAG  
GCCTCCTGGGAGAAAGAGAAGGCCCTGGGAGGTAGAGAAGGCCCTGGAAGGAAGTGAAGGCCTATT  
GGTGAATGATCTGCACCGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR216075 representing NM\_029755  
Red=Cloning site Green=Tags(s)

MDQCPIPTLLEHGNSQVLFNNVEKIFYAPRGDIMCYTTLTEKFIIPRRKDWIGIFKVGWKTQEYYTFMWA  
 PLPKDQNKDSATQQEIQFKAYYLPKDVERYQFCYVDEDGLVRGTSVFPQFCPPDEDIMVVINKEKVEEM  
 EQLSEELYQONQELKDKYADLHEQLQRKQVALEATQRVNKLEHKVEEKASWEKEKASWEEEEKASWEEEEK  
 ASWEEEEKASWEEEEKASWEEEEKASWEEEEKASWEEEEKASWEEEEKASWEEEEKASWEEEEKASWEEEEK  
 ASWEKEKAPWEVEKAPWKEVKAYWVNDLHR

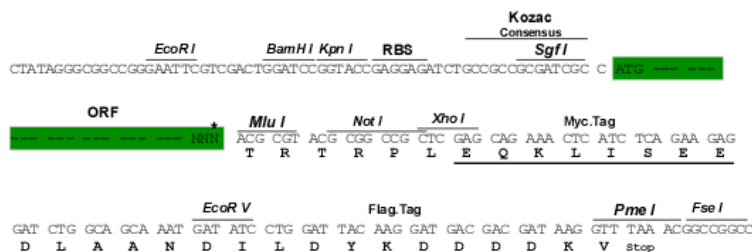
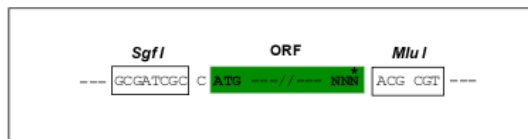
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1507\\_a07.zip](https://cdn.origene.com/chromatograms/ja1507_a07.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\_029755

**ORF Size:** 930 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\\_029755.3](#), [NP\\_084031.2](#)

**RefSeq Size:** 1556 bp

**RefSeq ORF:** 933 bp

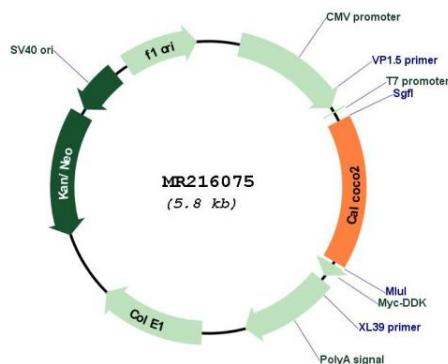
**Locus ID:** 76815

**Cytogenetics:** 11 59.4 cM

**MW:** 57 kDa

**Gene Summary:** Xenophagy-specific receptor required for autophagy-mediated intracellular bacteria degradation (By similarity). Acts as an effector protein of galectin-sensed membrane damage that restricts the proliferation of infecting pathogens upon entry into the cytosol by targeting LGALS8-associated bacteria for autophagy (By similarity). Initially orchestrates bacteria targeting to autophagosomes and subsequently ensures pathogen degradation by regulating pathogen-containing autophagosome maturation (By similarity). Bacteria targeting to autophagosomes relies on its interaction with MAP1LC3A, MAP1LC3B and/or GABARAPL2, whereas regulation of pathogen-containing autophagosome maturation requires the interaction with MAP3LC3C (By similarity). May play a role in ruffle formation and actin cytoskeleton organization and seems to negatively regulate constitutive secretion (By similarity).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR216075