

Product datasheet for **MR227046**

Cyth2 (NM_001112701) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cyth2 (NM_001112701) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cyth2
Synonyms:	ARNO; CLM2; Pscd2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR227046 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGACGGTGTCTACGAGCCCCAGACTTGACTCCAGAGGAGCGCATGGAGTTGGAGAACATCCGGC
GGCGCAAGCAGGAGCTGCTGGTGGAGATCCAGCGCCTGCGAGAAGAGCTAAGTGAAGCTATGAGCGAGGT
GGAGGGTCTGGAGGCCAATGAGGGCAGTAAGACCTTGCAGCGGAACCGGAAGATGGCAATGGGCAGGAAG
AAATTCACATGGACCCAAAAAGGGGATCCAATTCTTGGTGGAGCATGAACTTCTGCAGAACACGCCTG
AGGAAATTGCCCGCTTCTGTACAAGGGCGAGGGGCTGAACAAGACAGCCATTGGGGACTACCTAGGGGA
AAGGGAAGAGCTGAACCTGTCTGTGCTCCATGTTCTGTGGATCTCCATGAGTTCACCGACCTCAACCTG
GTGCAGGCCCTCCGCAATTCCTATGGAGCTTTCGCTCCCTGGAGAGGCTCAGAAAATTGATCGAATGA
TGGAGGCCTTTGCCAGAGATACTGCTTATGCAACCCTGGGGTCTTCCAGTCTACAGACACCTGCTACGT
GTTGTCTTTGCCGTGATCATGCTGAACACCAGCCTTCAAAATCCCAATGTCAAGGACAAGCCGGGCCTG
GAGCGCTTTGTGGCCATGAACCGGGCATCAACGAGGGTGGGGATCTGCCTGAGGATCTTCTCAGGAACC
TCTACGACAGCATCCGGAACGAGCCCTTCAAAATCCCAGAGGATGATGGGAATGATCTCACCCACACCTT
CTTCAACCCAGACCGAGAGGGCTGGCTCCTAAAGCTGGGAGGGGCGGGTGAAGACTTGGAAAGCGGCGC
TGTTTCATCCTTACAGACAACCTGCTCTACTACTTTGAATACACTACGGACAAGGAGCCCGAGGGATTA
TCCCCCTAGAGAACCTGAGCATCCGGGAGGTGGACGATCCTCGGAAGCCGAACTGCTTTGAGCTTTACAT
TCCCAACAATAAGGGACAGCTCATCAAAGCCTGCAAAACAGAGGCTGACGGCCGGGTAGTGGAGGGGAAC
CACATGGTGTACCGAATCTCAGCACCCACCCAGGAGGAGAAAGATGAGTGGATCAAATCCATCCAGGCTG
CTGTAAGTGTGGACCCCTTCTATGAGATGTTGGCAGCAAGAAAGAAGCGAATTTCTGTGAAGAAGAAGCA
AGAACAACCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR227046 protein sequence
Red=Cloning site Green=Tags(s)

MEDGVYEPPDLTPEERMELNIRRRKQELLVEIQRLREELSEAMSEVEGLEANEKSTLQNRKMMAMGRK
 KFNMDPKKGIQFLVEHELLQNTPEEIAFLYKGEGLNKTAIGDYLGEREELNLSVLHASVDLHEFTDLNL
 VQALRQFLWSFRLPGEAQKIDRMMEFAQRYCLCNPVGFQSTDTCYVLSFAVIMLNTSLHNPVNRDKPGL
 ERFVAMNRGINEGGDLPEDLLRNLYDSIRNEPFKIPEDDGNDLTHTFFNPDREGWLLKLGGRVKTWKRR
 WFILTDNCLYYFEYTTDKPRGIIPLENLSIREVDDPRKPNCFELYIPNNKGLIKACKTEADGRVVEGN
 HMVYRISAPTQEEKDEWIKSIQAAVSVDPPFYEMLAARKKRISVKKKQEQP

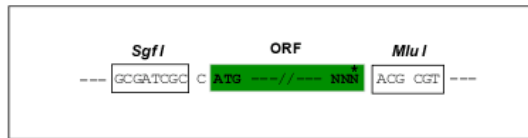
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_00112701

ORF Size: 1203 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_00112701.1](#), [NP_001106171.1](#)

RefSeq Size: 2524 bp

RefSeq ORF: 1200 bp

Locus ID: 19158

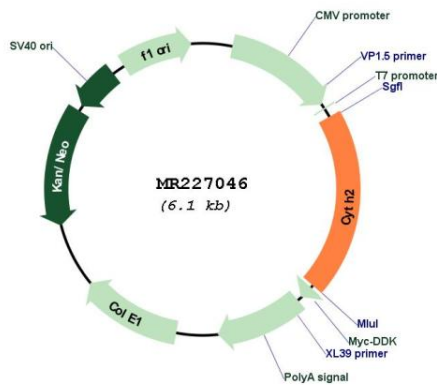
UniProt ID: [P63034](#)

Cytogenetics: 7 B3

MW: 46.5 kDa

Gene Summary: Acts as a guanine-nucleotide exchange factor (GEF). Promotes guanine-nucleotide exchange on ARF1, ARF3 and ARF6. Activates ARF factors through replacement of GDP with GTP (PubMed:18042453). The cell membrane form, in association with ARL4 proteins, recruits ARF6 to the plasma membrane (By similarity). Involved in neurite growth (PubMed:25326380). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR227046