

## Product datasheet for MR222514

### Cyth1 (NM\_001112700) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cyth1 (NM_001112700) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cyth1
Synonyms:	CLM1; CTH-1; CYTIP; Pscd1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222514 representing NM_001112700 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTTCTTAAAGAAGAAGGGGAGGATGTCCCGAGTGACCTGACTGCAGAAGAGCGTCAAGAAGTGGAGA  
ACATCCGGCGGAGGAAGCAGGAGCTGCTGGCTGACATCCAGAGGCTAAAGGAAGAGATAGCAGAAGTTGC  
TAATGAAATTGAAAGCCTGGGATCCACAGAGGAAAGGAAAACATGCAGAGGAACAAACAGGTAGCCATG  
GGCAGAAAGAAATTTAACATGGATCCTAAAAGGGGATCCAGTTCTTAATCGAGAATGGCCTGCTGAAGA  
ACACTTGTGAGGACATCGCCAGTTCCTGTATAAAGGGGAGGGGCTCAACAAGACAGCCATCGGCGACTA  
CCTTGGGGAGAGGGATGAGTTCAGCATCCAGGTCCTGCATGCGTTTGTGGAAGTGCACGAGTTCACCGAC  
CTGAACCTCGTCCAGGCCTTGGCGAGTTCCTGTGGAGCTCCGGCTCCCTGGAGAGGCCAGAAGATTG  
ACCGGATGATGGAGGCCTTTGCCAGCGGTACTGTCAAGTCAACTACTGGGGTGTCCAGTCTACAGACAC  
CTGCTATGTCCTGTCTTCGCAATCATAATGCTGAACACCAGCCTACACAACCCCAATGTCAAAGACAAG  
CCTACGGTGGAGAGATTCATCGCCATGAACCGAGGCATCAACGACGGAGGAGACCTGCCGGAGGAGCTGC  
TCCGGAATCTCTATGAGAGCATCAAAAACGAGCCCTTTAAATCCCCGAAGATGATGGGAATGACCTCAC  
ACACACTTCTCAATCCAGACCGAGAGGGCTGGCTGCTCAAGCTCGGAGGTGGCAGGGTAAAGACCTGG  
AAGAGGGCTGGTTCATCTGACTGACAAGTGCCTTTACTACTTTGAATACACCAGGACAAAGAGCCCC  
GCGGGATTATCCCCCTGGAGAACCCTGAGTATCCGAGAAGTGGAGGACTCCAAAAGCCGAAGTCTTTGA  
GCTTTATATCCCTGACAATAAAGACCAGGTGATTAAGGCCTGTAAGACAGAGGCGGACGGCGAGTGGTG  
GAAGGGAACCACACTGTGTACCGCATCTCAGCCCCAAGTCCGGAAGAGAAGGAAAGACTGGATCAAATGCA  
TCAAGGCTGCCATCAGCAGAGACCCTTTCTACGAGATGCTTGACGACGGAAAAAGAAGTCTCCTCCAC  
AAAGAGACAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >MR222514 representing NM\_00112700  
 Red=Cloning site Green=Tags(s)

MVLKEEGEDVPSDLTAERQELNIRRRKQELLADIQRLKEEIAEVANEIESLGSTEERKNMQRNKQVAM  
 GRKKFNMDPKKGIQFLIENGLLKNTCEDIAQFLYKGEGLNKTAIGDYLGGERDEFSIQVLHAFVELHEFTD  
 LNLVQALRQFLWSFRLPGEAQKIDRMMEAFQRYCQCNTGVFQSTDTCYVLSFAIIMLNTSLHNPVVKDK  
 PTVERFIAMNRGINDGGDLPEELLRNLYESIKNEPFKIPEDDGNLTHYFFNPDREGWLLKLGGRVKTW  
 KRRWFILTDNCLYFYEYTTDKPRGIIPLENLSIREVEDSKKPNCFELYIPDNKDQVIKACKTEADGRVY  
 EGNHTVYRISAPTPEEKEDWIKCIKAAISRDPFYEMLAARKKKVSSTKRH

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\_00112700

**ORF Size:** 1200 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\\_00112700.2](#)

**RefSeq Size:** 3119 bp

**RefSeq ORF:** 1203 bp

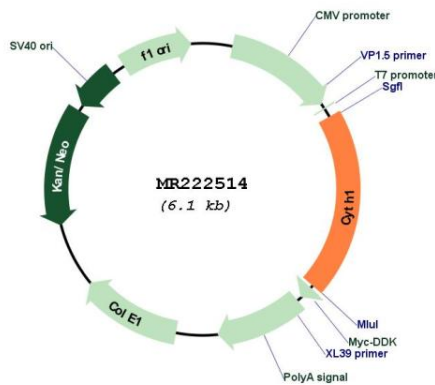
**Locus ID:** 19157

**Cytogenetics:** 11 E2

**MW:** 46.9 kDa

**Gene Summary:** Promotes guanine-nucleotide exchange on ARF1, ARF5 and ARF6 (PubMed:18042453, PubMed:20080746). Promotes the activation of ARF factors through replacement of GDP with GTP (PubMed:18042453). Plays an important role in membrane trafficking, during junctional remodeling and epithelial polarization, through regulation of ARF6 activity (PubMed:20080746, PubMed:29420262).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR222514