

## Product datasheet for **MR230463**

### Cbs (NM\_001271353) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cbs (NM_001271353) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cbs
Synonyms:	AI047524; AI303044; HIP4
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>MR230463 representing NM\_001271353  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCTTCAGGGACATCCAGTGTGAAGATGGCTCTGCTGGGGCTTCCAGCACTTGGACATGCACTCAG  
 AAAAGAGACAACCTGGAGAAGGGCCCTCAGGGGACAAGGATCGAGTCTGGATCCGGCCTGATACCCCAAG  
 CAGATGTACTTGGCAGCTGGGCAGGGCCATGGCGGACTCCCCACATTATCACACAGTGTGACCAATCC  
 CCCAAAATTTTACCAGATATTCTGAGGAAAATTGGGAACACCCCTATGGTCAGAATCAACAAGATCTCAA  
 AGAATGCCGGTCTCAAGTGTGAGCTCTTGGCCAAGTGTGAGTCTTCAATGCGGGTGGGAGTGTGAAGGA  
 CCGCATCAGCCTTCGGATGATCGAAGATGCTGAGCGAGCTGAAACTTGAAGCCTGGAGACACTATCATT  
 GAGCCAATTCTGGCAACACAGGATCGGGCTGGCTCTGGCTGCTGCAGTGAAGGGCTATCGCTGCATTA  
 TCGTGATCCGGAGAAGATGAGTATGGAGAAGGTGGATGTCTGCGGGCTCTGGGAGCCGAGATTGTGAG  
 GACGCCACCAATGCCAGATTTGATTCCCCGAGTCCCACGTGGGAGTGGCATGGCGACTGAAGAACGAA  
 ATCCCTAATTCTCACATTCTGGACCAGTACCGCAATGCCAGCAACCCCTTGGCACACTACGATGACACCG  
 CCGAGGAGATCCTGCAGCAGTGTGACGGGAAGCTGGATATGCTGGTGGCTTCCAGCAGGCACGGGTGGCAC  
 CATCACAGGGATCGCCAGAAAGCTGAAGGAGAAGTGCCCTGGCTGTAAAATCATCGGTGTCGATCCTGAA  
 GGCTCCATCCTTGCAGGAGCCGAGGAGCTGAACCAGACGGAGCAAACAGCCTATGAGGTGGAAGGGATTG  
 GCTACGACTTCATCCCGACAGTCTGGACAGGGCGGTGGTGGATAAGTGGTTCAAGAGCAACGATGAAGA  
 TTCCTTCGCCCTTTCGCCGATGCTCATCGCACAGGAAGGACTGCTATGTGGTGAAGCTCTGGCAGCGCC  
 ATGGCTGTGGCTGTGAAGGCTGCCCGGAGCTGCAGGAAGGGCAGCGCTGTGTGGTATCCTGCCTGACT  
 CTGTGCGGAACATACATGTCCAAGTCTCTGAGTGACAAATGGATGCTGCAGAAAGTTCATGAAAGAGGA  
 GCTCTCAGTGAAGAGGCCCTGGTGGTGGCTCTGCGTGTTCAAGAGCTGAGCCTGTCGGCCCCGCTGACC  
 GTGTTGCCACGGTACCTGTGAGGACACCATCGCCATCCTCCGGGAGAAGGGTTTTGACCAGGCACCTG  
 TGGTCAACGAGTCTGGGGCCATCCTAGGGATGGTACCCTCGGGAACATGCTGTATCCTGCTGGCTGG  
 AAAGGTGCGGCCATCAGACGAAGTCTGCAAAGTCTCTACAAGCAGTTCAAACCGATCCACCTGACCGAC  
 ACGCTGGGCACACTCTCTACATCCTGGAGATGGACCCTTCGCCCTGGTGGTCCACGAGCAGATCCAAT  
 ACTGCAGCAATGGCATGTCCAGCAAGCAGCAGATGGTGTGGGGTTGCTACTGCCATTGACCTGCTAAA  
 CTTCTGTGGCAGCCGTGAGCAGACCCAGACA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR230463 representing NM\_001271353  
 Red=Cloning site Green=Tags(s)

MPSGTSQCEDGSAGGFQHLDMHSEKRQLEKGPSGDKDRVWIRPDTPSRCTWQLGRAMADSPHYHTVLT  
 PKILPDILRKIGNTPMVRINKISKNAGLKCELLAKCEFFNAGGSVKDRISLRMIEDAERAGNLKPGDTII  
 EPTSGNTGIGLALAAAVKGYRCIIVMPEKMSMEKVDVLRALGAEIVRTPNARFDSPESHVGVAWRLKNE  
 IPNSHILDQYRNASNPLAHYDDTAEELQCDGKLDMLVASAGTGGTITGIARKLKEKCPGCKIIGVDP  
 GSILAEPEELNQTEQTAYEVEGIGYDFIPTVLDRAVVDKWFKSNDSDSFARMLIAQEGLLCGGSSGSA  
 MAVAVKAARELQEGQRCVVILPDSVRNYMSKFLSDKWMLQKGFMEELSVKRPWWRLRVQELSLAPLT  
 VLPTVTCEDTIAILREKGFQAPVVNESGAILGMVTLGNMLSSLLAGKVRPSDEVCKVLYKQFKPIHLTD  
 TLGTLSHILEMDHFALVVHEQIQYCSNGMSSKQMVFGVVTAIDLLNFVAAREQTQT

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI



<b>ACCN:</b>	NM_001271353
<b>ORF Size:</b>	1641 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	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>	<a href="#">NM_001271353.1</a> , <a href="#">NP_001258282.1</a>
<b>RefSeq Size:</b>	2458 bp
<b>RefSeq ORF:</b>	1644 bp
<b>Locus ID:</b>	12411
<b>UniProt ID:</b>	<a href="#">Q91WT9</a>
<b>Cytogenetics:</b>	17 16.93 cM
<b>MW:</b>	60.6 kDa
<b>Gene Summary:</b>	Hydro-lyase catalyzing the first step of the transsulfuration pathway, where the hydroxyl group of L-serine is displaced by L-homocysteine in a beta-replacement reaction to form L-cystathionine, the precursor of L-cysteine. This catabolic route allows the elimination of L-methionine and the toxic metabolite L-homocysteine (By similarity). Also involved in the production of hydrogen sulfide, a gasotransmitter with signaling and cytoprotective effects on neurons (By similarity).[UniProtKB/Swiss-Prot Function]