

Product datasheet for **RC203826**

GLO1 (NM_006708) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GLO1 (NM_006708) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GLO1
Synonyms: GLOD1; GLYI; HEL-S-74
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC203826 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

**ATGGCAGAACCGCAGCCCCCGTCCGGCGGCCTCACGGACGAGGCCGCCCTCAGTTACTGCTCCGACGCGG
ACCCAGTACCAAGGATTTTCTATTGCAGCAGACCATGCTACGAGTGAAGGATCCTAAGAAGTCACTGGA
TTTTTATACTAGAGTTCTTGAATGACGCTAATCCAAAATGTGATTTTCCATTATGAAGTTTCACTC
TACTTCTTGGCTTATGAGGATAAAAATGACATCCCTAAAGAAAAAGATGAAAAATAGCCTGGGCGCTCT
CCAGAAAAGCTACACTTGAGCTGACACACAATTGGGGCACTGAAGATGATGAGACCCAGAGTTACCACAA
TGGCAATTCAGACCCTCGAGGATTCGGTCATATTGGAATTGCTGTTCCTGATGTATACAGTCTGTAAA
AGGTTTGAAGAACTGGGAGTCAAATTTGTGAAGAACTGATGATGGTAAAATGAAAGGCCTGGCATTTA
TTCAAGATCCTGATGGCTACTGGATTGAAATTTGAATCCTAACAAAATGGCAACCTTAATG**

**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA**

Protein Sequence: >RC203826 protein sequence
Red=Cloning site Green=Tags(s)

MAEPQPPSGGLTDEAALSYCSDADPSTKDFLLQQTMLRVKDPKSLDFYTRVLGMTLIQKDFPIMKFSL
YFLAYEDKNDIPKEKDEKIAWALSRKATLELTHNWGETDEDETQSYHNGNSDPRFGHIGIIVPDVYSACK
RFEELGVKFKVKKPDDGKMKGLAFIQDPDGYWIEILNPNKMATLM

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

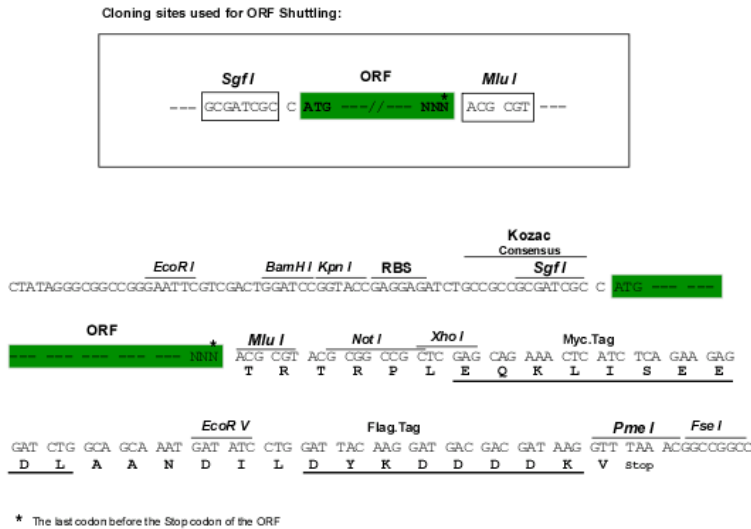
Chromatograms: https://cdn.origene.com/chromatograms/mk6087_d04.zip



[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006708

ORF Size: 552 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_006708.3](#)

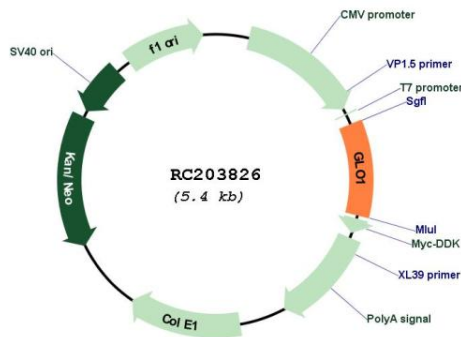
RefSeq Size: 2071 bp

RefSeq ORF: 555 bp

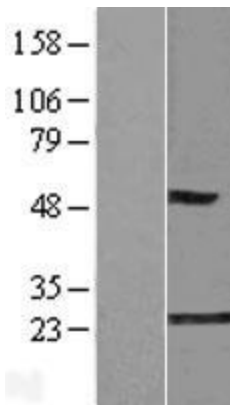
Locus ID: 2739
UniProt ID: [Q04760](#)
Cytogenetics: 6p21.2
Domains: Glyoxalase
Protein Pathways: Pyruvate metabolism
MW: 20.8 kDa

Gene Summary: The enzyme encoded by this gene is responsible for the catalysis and formation of S-lactoyl-glutathione from methylglyoxal condensation and reduced glutathione. Glyoxalase I is linked to HLA and is localized to 6p21.3-p21.1, between HLA and the centromere. [provided by RefSeq, Jul 2008]

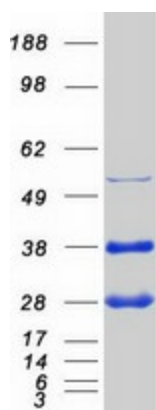
Product images:



Circular map for RC203826



Western blot validation of overexpression lysate (Cat# [LY416467]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203826 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GLO1 protein (Cat# [TP303826]). The protein was produced from HEK293T cells transfected with GLO1 cDNA clone (Cat# RC203826) using MegaTran 2.0 (Cat# [TT210002]).