

Product datasheet for SC210760

OriGene Technologies, Inc.

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Glutathione Peroxidase 3 (GPX3) (NM 002084) Human 3' UTR Clone

Product data:

Product Type: 3' UTR Clones

Product Name: Glutathione Peroxidase 3 (GPX3) (NM_002084) Human 3' UTR Clone

Symbol: Glutathione Peroxidase 3
Synonyms: GPx-P; GSHPx-3; GSHPx-P

Mammalian Cell

Selection:

Neomycin

Vector: pMirTarget (PS100062)

ACCN: NM_002084

Insert Size: 888 bp

Insert Sequence: >SC210760 3'UTR clone of NM_002084

The sequence shown below is from the reference sequence of NM_002084. The complete

sequence of this clone may contain minor differences, such as SNPs.

Blue=Stop Codon Red=Cloning site

GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAGGCCAAGAAGGGCGGAAAGATCGCCGTG

TAACAATTGGCAGAGCTCAGAATTCAAGCGATCGCC

ACGCGTAAGCGGCCGCGCATCTAGATTCGAAGAAAATGACCGACCAAGCGACGCCCAACCTGCCATCA

CGAGATTTCGATTCCACCGCCGCCTTCTATGAAAGG

Restriction Sites: Sgfl-Mlul





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OTI Disclaimer: Our molecular clone sequence data has been matched to the sequence identifier above as a

point of reference. Note that the complete sequence of this clone is largely the same as the

reference sequence but may contain minor differences, e.g., single nucleotide

polymorphisms (SNPs).

Components: The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The

package also includes 100 pmols of both the corresponding 5' and 3' vector primers in

separate vials.

RefSeq: <u>NM 002084.5</u>

Summary: The protein encoded by this gene belongs to the glutathione peroxidase family, members of

which catalyze the reduction of organic hydroperoxides and hydrogen peroxide (H2O2) by glutathione, and thereby protect cells against oxidative damage. Several isozymes of this gene

family exist in vertebrates, which vary in cellular location and substrate specificity. This

isozyme is secreted, and is abundantly found in plasma. Downregulation of expression of this gene by promoter hypermethylation has been observed in a wide spectrum of human malignancies, including thyroid cancer, hepatocellular carcinoma and chronic myeloid

leukemia. This isozyme is also a selenoprotein, containing the rare amino acid selenocysteine (Sec) at its active site. Sec is encoded by the UGA codon, which normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, designated the Sec insertion sequence (SECIS) element, that is necessary for the recognition

of UGA as a Sec codon, rather than as a stop signal. Alternatively spliced transcript variants

have been found for this gene. [provided by RefSeq, Jul 2016]

Locus ID: 2878

MW: 31