

Product datasheet for **RG222594**

kynurenine 3 monooxygenase (KMO) (NM_003679) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | kynurenine 3 monooxygenase (KMO) (NM_003679) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | kynurenine 3 monooxygenase |
| Synonyms: | dj317G22.1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>RG222594 representing NM_003679
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACTCATCTGTCATTCAAAGGAAAAAGTAGCTGTCATTGGTGGTGGCTTGGTTGGCTCATTACAAG
 CATGCTTTCTTGCAAAGAGGAATTTCCAGATTGATGTATATGAAGCTAGGGAAGATACTCGAGTGGCTAC
 CTTACACGCTGGAAGAAGCATTAACTTAGCCCTTCTCATAGAGGACGACAAGCCTTGAAAGCTGTTGGC
 CTGGAAGATCAGATTGTATCCCAAGGATTCCCATGAGAGCAAGAATGATCCACTCTCTTCAGGAAAA
 AGTCTGCAATTCCTATGGGACAAAGTCTCAGTATATTCTTTCTGAAGCAGAGAAAAATCTAAACAAGGA
 TCTATTGACTGCTGCTGAGAAATACCCCAATGTGAAAATGCACTTTAACCACAGGCTGTTGAAATGTAAT
 CCAGAGGAAGGAATGATCACAGTCTGGATCTGACAAAGTTCCCAAAGATGTCATTGTGACCTCATTG
 TAGGATGTGATGGAGCCTATTCAACTGTCAGATCTCACCTGATGAAGAAACCTCGCTTTGATTACAGTCA
 GCAGTACATTCTCATGGGTACATGGAGTTGACTATTCCACCTAAGAACGGAGATTATGCCATGGAACCT
 AATTATCTGCATATTTGGCCTAGAAATACCTTTATGATGATTGCACTTCCTAACATGAACAAATCATTCA
 CATGTACTTTGTTCATGCCCTTTGAAGAGTTTGA AAAACTTCTAACCAGTAATGATGTGGTAGATTTCTT
 CCAGAAATACTTTCCAGATGCCATCCCTCTAATTGGAGAGAAACTCCTAGTGCAAGATTTCTTCTGTTG
 CCTGCCAGCCCATGATATCTGTAAAGTCTCTTCACTTTAAATCTCACTGTGTACTGCTGGGAG
 ATGCAGCTCATGCTATAGTCCGCTTTTTTGGGCAAGGAATGAATGCGGGCTTTGAAGACTGCTTGGTATT
 TGATGAGTTAATGGATAAATTCAGTAACGACCTTAGTTTGTGCTTCTGTTCTCAAGATTGAGAATC
 CCAGATGATCACGCGATTTCCAGACCTATCCATGTACAATTACATAGAGATGCGAGCACATGTCAACTCAA
 GCTGGTTCATTTTTTCAGAAGAACATGGAGAGATTTCTTCATGCGATTATGCCATCGACCTTTATCCCTCT
 CTATAACAATGGTCACTTTTTCCAGAATAAGATACCATGAGGCTGTGCAGGTTGGCATTGGCAAAAAAAG
 GTGATAAACAAAGGACTCTTTTTCTGGGATCACTGATAGCCATCAGCAGTACCTACCTACTTATACACT
 ACATGTACCACGATCTTCTCTGCTTGAAGAAGACCATGGAACCTGGATAGCTCACTTCCGGAATACAAC
 ATGTTTCCCCGCAAGGCCGTGGACTCCCTAGAACAAATTTCCAATCTCATTAGCAGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG222594 representing NM_003679
 Red=Cloning site Green=Tags(s)

MDSSVIQRKKVAVIGGGLVGLSLQACFLAKRNFQIDVYEAREDTRVATFTRGRSINLALSHRGRQALKAVG
 LEDQIVSQGIPMRARMIHLSGKKS AIPYGTKSQYILSVSRENLNKDLLTAAEKYPNVKMHFNHRLKCN
 PEEGMITVLSGDKVPKDVTCDLIVGCDGAYSTVRSHLMKKPRFDYSQQYIPHYMELTIPPKNGDYAMEP
 NYLHIWPRNTFMMIALPNMNSFTCTLFMPFEFEKLLTSNDVVDFFQKYFPDAIPLIGEKLLVQDFLL
 PAQPMISVKCSSFHKSHCVLLGDAAHAIVPPFGQGMNAGFEDCLVFDELMDFSNLCLPVSRLRI
 PDDHAISDL SMYNYIEMRAHVNSSWFIFQKNMERFLHAI MPSTFIPLYTMVTF SRIRYHEAVQRWHWQKK
 VINKGLFFLGSLLAISSTYLLIHYSRPSFLCLRRPWNWIAHFRNTTCFPAKAVDSLEQISNLISR

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_003679

ORF Size: 1458 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_003679.2](#), [NP_003670.1](#)

RefSeq Size: 4992 bp

RefSeq ORF: 1461 bp

Locus ID: 8564

UniProt ID: [O15229](#)

Cytogenetics: 1q43

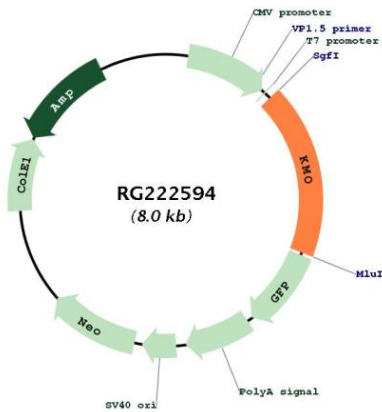
Domains: Monooxygenase

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Tryptophan metabolism

Gene Summary: This gene encodes a mitochondrion outer membrane protein that catalyzes the hydroxylation of L-tryptophan metabolite, L-kynurenine, to form L-3-hydroxykynurenine. Studies in yeast identified this gene as a therapeutic target for Huntington disease. [provided by RefSeq, Oct 2011]

Product images:



Circular map for RG222594