

## Product datasheet for **RG206592**

### IDO1 (NM\_002164) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** IDO1 (NM\_002164) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** IDO1  
**Synonyms:** IDO; IDO-1; INDO  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG206592 representing NM\_002164  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCACACGCTATGGAAAACCTGGACAATCAGTAAAGAGTACCATATTGATGAAGAAGTGGGCTTTG  
 CTCTGCCAAATCCACAGGAAAATCTACCTGATTTTTATAATGACTGGATGTTTCATTGCTAAACATCTGCC  
 TGATCTCATAGAGTCTGGCCAGCTTCGAGAAAGAGTTGAGAAGTTAAACATGCTCAGCATTGATCATCTC  
 ACAGACCACAAGTCACAGCGCCTTGCACGTCTAGTTCTGGGATGCATCACCATGGCATATGTGTGGGCA  
 AAGGTCATGGAGATGTCCGTAAGGTCTTGCCAAGAAATATTGCTGTTCCCTACTGCCAATCTCCAAGAA  
 ACTGGAAGTGCCTCCTATTTTGGTTTATGCAGACTGTGTCTTGGCAAACCTGGAAGAAAAAGGATCCTAAT  
 AAGCCCTGACTTATGAGAACATGGACGTTTTTGTCTCATTTCGTGATGGAGACTGCAGTAAAGGATTCT  
 TCCTGGTCTCTCTATTGGTGGAAATAGCAGCTGCTTCTGCAATCAAAGTAATTCCTACTGTATTCAAGGC  
 AATGCAAATGCAAGAACGGGACACTTTGCTAAAGGCGCTGTTGGAAATAGCTTCTTGCTTGGAGAAAGCC  
 CTTCAAGTGTTCACCAAATCCACGATCATGTGAACCCAAAGCATTTCCTCAGTGTCTTCGCATATATT  
 TGTCTGGCTGGAAAGGCAACCCAGCTATCAGACGGTCTGGTGTATGAAGGTTCTGGGAAGACCCAAA  
 GGAGTTTGAGGGGCGAGTGCAGGCCAAAGCAGCGTCTTCAGTGTCTTACGTCCTGCTGGGCATCCAG  
 CAGACTGCTGGTGGAGGACATGCTGCTCAGTTCCTCCAGGACATGAGAAGATATATGCCACCAGCTCACA  
 GGAACCTCCTGTGCTCATTAGAGTCAAATCCCTCAGTCCGTGAGTTTGTCTTTCAAAGGTGATGCTGG  
 CCTGCGGGAAGCTTATGACGCCTGTGTGAAAGCTCTGGTCTCCCTGAGGAGCTACCATCTGCAAATCGTG  
 ACTAAGTACATCCTGATTCTGCAAGCCAGCAGCCAAAGGAGAATAAGACCTCTGAAGACCTTCAAAC  
 TGGAAAGCCAAAGGAACTGGAGGCACTGATTTAATGAATTCCTGAAGACTGTAAGAAGTACAACCTGAGAA  
 ATCCCTTTGAAGGAAGT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG206592 representing NM\_002164  
 Red=Cloning site Green=Tags(s)

MAHAMENSWTISKEYHIDEEVGFALPNPQENLPDFYNDWMFIAKHL PDLIESGQLRERVEKLNMLSIDHL  
 TDHKSQRLARLVLGCITMAYVWGKGGHGDVRKVLPRNIAVPYCQLSKKLELPPILVYADCVLANWKKKDPN  
 KPLTYENMDVLF SFRDGDCKSGFFLVSLLEIAAASAIKVIPTVFKAMQMQRD TLLKALLEIASCLEKA  
 LQVFHQIHDHVNPKAFFSVLRIYLSGWKGNPQLSDGLVYEGFWEDPKEFAGGSAGQSSVFQCFDVLGIGQ  
 QTAGGGHAAQFLQDMRRYMPPAHRNFLCSLESNPSVREFVLSKGDAGLREAYDACVKALVLSRSHLQIV  
 TKYILIPASQQPKENKTSSEDPKLEAKGTGGTDL MNFLKTVRSTTEKSLKKEG

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_002164

**ORF Size:** 1209 bp

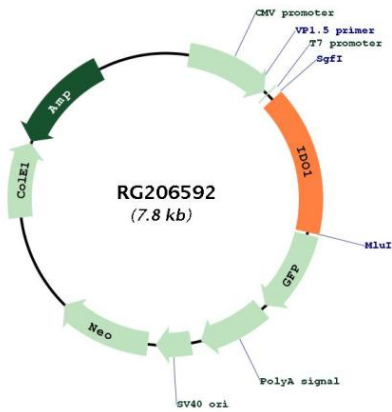
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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.

<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_002164.6</a>
<b>RefSeq Size:</b>	1655 bp
<b>RefSeq ORF:</b>	1212 bp
<b>Locus ID:</b>	3620
<b>UniProt ID:</b>	<a href="#">P14902</a>
<b>Cytogenetics:</b>	8p11.21
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Metabolic pathways, Tryptophan metabolism
<b>Gene Summary:</b>	This gene encodes indoleamine 2,3-dioxygenase (IDO) - a heme enzyme that catalyzes the first and rate-limiting step in tryptophan catabolism to N-formyl-kynurenine. This enzyme acts on multiple tryptophan substrates including D-tryptophan, L-tryptophan, 5-hydroxy-tryptophan, tryptamine, and serotonin. This enzyme is thought to play a role in a variety of pathophysiological processes such as antimicrobial and antitumor defense, neuropathology, immunoregulation, and antioxidant activity. Through its expression in dendritic cells, monocytes, and macrophages this enzyme modulates T-cell behavior by its peri-cellular catabolization of the essential amino acid tryptophan.[provided by RefSeq, Feb 2011]

Product images:



Circular map for RG206592