

## Product datasheet for **RG237500**

### Ornithine Decarboxylase (ODC1) (NM\_001287188) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ornithine Decarboxylase (ODC1) (NM_001287188) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ornithine Decarboxylase
Synonyms:	BABS; NEDBA; NEDBIA; ODC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237500 representing NM_001287188. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGATGACTTTTGTAGTGAAGTTGAGTTGATGAAAGTTGCCAGAGCACATCCCAAAGCAAAGTTGGTT
TTGCGGATTGCCACTGATGATCCAAAGCAGTCTGTCGTCTCAGTGTGAAATTCGGTGCCACGCTCAGA
ACCAGCAGGCTCCTTTTGGAACGGGCGAAAGAGCTAAATATCGATGTTGTTGGTGTGAGCTTCCATGTA
GGAAGCGGCTGTACCGATCCTGAGACCTTCGTGCAGGCAATCTCTGATGCCCGCTGTGTTTTGACATG
GGGGCTGAGGTTGGTTTCAGCATGTATCTGCTTATGATATTGGCGGTGGCTTTCCTGGATCTGAGGATGTG
AACTTAAATTTGAAGAGATCACCGCGTAATCAACCCAGCGTTGGACAAATACTTCCGTCAGACTCT
GGAGTGAGAATCATAGCTGAGCCCGGCAGATACTATGTTGCATCAGCTTTCACGCTTGCAGTTAATATC
ATTGCCAAGAAAATTGTATTAAGGAACAGACGGGCTCTGATGACGAAGATGAGTCGAGTGAGCAGACC
TTTATGTATTATGTGAATGATGGCGTCTATGGATCATTTAATTGCATACTCTATGACCACGCACATGTA
AAGCCCTTCTGCAAAAGAGACCTAAACCAGATGAGAAGTATTATTCATCCAGCATATGGGGACCAACA
TGTGATGGCCTCGATCGGATTGTTGAGCGCTGTGACCTGCCTGAAATGCATGTGGGTGATTGGATGCTC
TTTGAAAACATGGGCGCTTACACTGTTGCTGCTGCCTCTACGTTCAATGGCTTCCAGAGGCCGACGATC
TACTATGTGATGTCAGGGCCTGCGTGGCAACTCATGCAGCAATCCAGAACCCTGACTTCCCACCCGAA
GTAGAGGAACAGGATGCCAGCACCTGCCTGTGTCTTGTGCTGGGAGAGTGGGATGAAACGCCACAGA
GCAGCCTGTGCTTCGGCTAGTATTAATGTG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG237500  
 Blue=ORF Red=Cloning site Green=Tag(s)

MMTFDSEVELMKVARAHPKAKLVLRIATDDSKAVCRLSVKFGATLRTSRLLLERAKELNIDVVGVSFHV  
 GSGCTDPETFFVQAI SDARCVFDMGAEVGF SMYLLDIGGGFPGSEDKLKFEEITGVINPALDKYFSPDS  
 GVRIIAEPGRYYVASAF TLAVNIIAKKIVLKEQTGSDDEDESSEQTFMYVNDGVYGSFNCILYDHAHV  
 KPLLQKRPKPDEKYYSSSIWGPTCDGLDRIVERCDLPEMHVGDWMLFENMGAYTVA AASTFNGFQRPTI  
 YYVMSGPAWQLMQQFQNPDPPEVEEQDASTLPVSCAWESGMKRHRACASASINV  
**TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV**  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001287188

**ORF Size:** 996 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).

**RefSeq:** [NM\\_001287188.2](#)

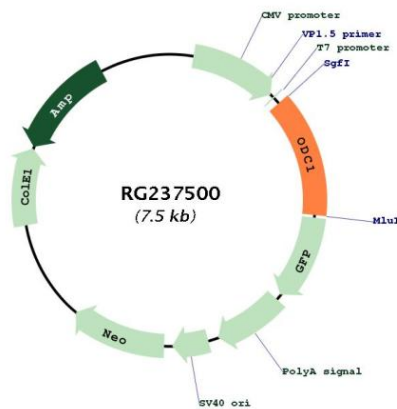
**RefSeq Size:** 2207 bp

**RefSeq ORF:** 999 bp

**Locus ID:** 4953  
**Cytogenetics:** 2p25.1  
**Protein Families:** Druggable Genome  
**Protein Pathways:** Arginine and proline metabolism, Glutathione metabolism, Metabolic pathways  
**MW:** 37.3 kDa

**Gene Summary:** This gene encodes the rate-limiting enzyme of the polyamine biosynthesis pathway which catalyzes ornithine to putrescine. The activity level for the enzyme varies in response to growth-promoting stimuli and exhibits a high turnover rate in comparison to other mammalian proteins. Originally localized to both chromosomes 2 and 7, the gene encoding this enzyme has been determined to be located on 2p25, with a pseudogene located on 7q31-qter. Multiple alternatively spliced transcript variants encoding distinct isoforms have been identified. [provided by RefSeq, Dec 2013]

### Product images:



Circular map for RG237500