

Product datasheet for **RG207622**

D aspartate oxidase (DDO) (NM_003649) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	D aspartate oxidase (DDO) (NM_003649) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	D aspartate oxidase
Synonyms:	DASOX; DDO-1; DDO-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207622 representing NM_003649 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGACCAGCCAGGCACTGGGAAACAAGGTTTGGTGCCAGAGATTTGGTGGCTTCCAAGACTGCTTTT
TCAGAGACAGGCTCATGGACACAGCACGGATTGCAGTTGTGGGGCAGGTGTGGTGGGGCTCTCCACGGC
TGTGTGCATCTCCAACTGGTGCCCGATGCTCCGTTACCATCATTTAGACAAGTTTACTCCAGATACC
ACCAGTGATGTGGCAGCCGGAATGCTTATTCCTCACACTTATCCAGATACACCCATTACACGCAGAAGC
AGTGGTTCAGAGAAACCTTTAATCACCTCTTTGCAATTGCCAATTCTGCAGAAGCTGGAGATGCTGGTGT
TCATTTGGTATCAGTTGGCAGATATTTAGAGCACTCCGACTGAAGAAGTGCCATTCTGGGCTGACGTG
GTTCTGGGATTTGAAAAGATGACTGAGGCTGAGCTGAAGAAATCCCCAGTATGTGTTGGTCAGGCTT
TTACAACCTGAAATGTGAATGCCTGCCTACCTCCCCTGGTGGAGAAAAGGATAAAGGGAAAGTGGAGG
CTGGCACTCACTCGGCAATAGAAGACCTGTGGGAACCTCATCCGTCCTTTGACATCGTGGTCAACTGT
TCAGGCCCTTGAAGCAGACAGCTTGAGGAGACTCAAAGATTTCCCTGTAAGGGGCAAGTCTCCAAG
TTCAGGCTCCCTGGTGGAGCATTTTATCCGAGATGGCAGTGGGCTGACATATTTATCCTGGTACATC
CCATGTAACCTAGGTGGAAGTGGCAAAAAGGGGACTGGAATCTGTCCCGGATGCAGAAAATAGCAGA
GAGATTCTTTCCGATGCTGTGCTCTGGAGCCCTCCCTCCAGGACCTGCAACATCAGGGAGAAGTGG
GCTTGAGGCCCTACAGGCCAGGCGTGCGACTGCAGACAGAGCTCCTTGCGCGAGATGGACAGAGGCTGCC
TGTAGTCCACCACTATGGCCATGGGAGTGGGGCATCTCAGTGCAGTGGGCACTGCTCTGGAGGCCGCC
AGGCTGTTGAGCGAGTGTGCCATGCCCTCAGGACCCCATTCCTCAAGTCAAACCTG

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG207622 representing NM_003649
 Red=Cloning site Green=Tags(s)

MRPARHWETRFGARDFFGGFQDCFFRDRLMDTARIAVVGAGVVGLSTAVCISKLVPRCSVTIISDKFTPDT
 TSDVAAGMLIPHTYDPTPIHTQKQWFRETFNHLFAIANSAEAGDAGVHLVSGWQIFQSTPTEEVFWADV
 VLGFRKMTEAELKFFPQYVFGQAF TTLKCECPAYLPWLEKRIKSGGWTLTRRIEDLWELHPSFDIVVNC
 SGLGSRQLAGDSKIFPVRGQVLQVQAPWVEHFIRDGSGLYIYPGTSHVTLGGTRQKGDWNLSPDAENSR
 EILSRCCALEPSLHGACNIREKVGLRPYRPGVRLQTELLARDGQRLPVVHHYGHGSGGISVHWGTALEAA
 RLVSECVHALRTPIPKSNL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003649

ORF Size: 1107 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_003649.3](#)

RefSeq Size: 1733 bp

RefSeq ORF: 1110 bp

Locus ID: 8528

UniProt ID: [Q99489](#)

Cytogenetics: 6q21

Domains: DAO

Protein Pathways: Alanine, aspartate and glutamate metabolism

Gene Summary: The protein encoded by this gene is a peroxisomal flavoprotein that catalyzes the oxidative deamination of D-aspartate and N-methyl D-aspartate. Flavin adenine dinucleotide or 6-hydroxyflavin adenine dinucleotide can serve as the cofactor in this reaction. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2019]

Product images:



Circular map for RG207622