

Product datasheet for **RG219402**

Xanthine Oxidase (XDH) (NM_000379) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Xanthine Oxidase (XDH) (NM_000379) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Xanthine Oxidase
Synonyms:	XAN1; XO; XOR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG219402 representing NM_000379 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

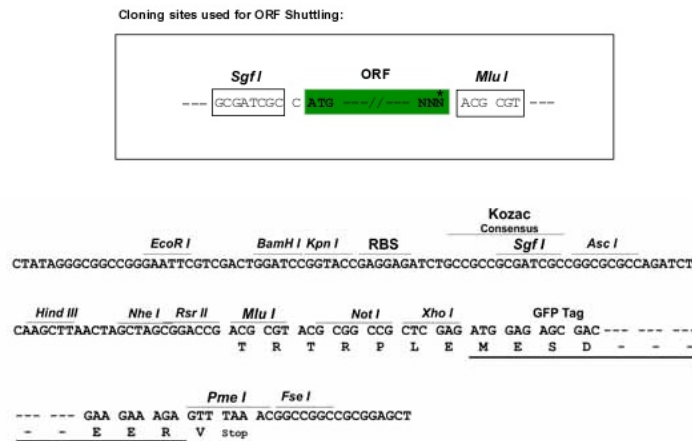
Protein Sequence: >RG219402 representing NM_000379
 Red=Cloning site Green=Tags(s)

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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

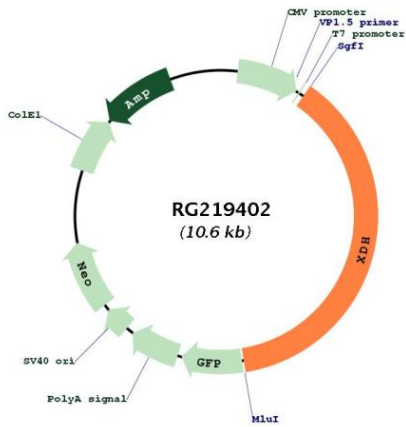


ACCN: NM_000379

ORF Size: 3999 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:	<ol style="list-style-type: none">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_000379.2 , NP_000370.1
RefSeq Size:	4428 bp
RefSeq ORF:	4002 bp
Locus ID:	7498
UniProt ID:	P47989
Cytogenetics:	2p23.1
Protein Families:	Druggable Genome
Protein Pathways:	Caffeine metabolism, Drug metabolism - other enzymes, Metabolic pathways, Purine metabolism
Gene Summary:	Xanthine dehydrogenase belongs to the group of molybdenum-containing hydroxylases involved in the oxidative metabolism of purines. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Xanthine dehydrogenase can be converted to xanthine oxidase by reversible sulfhydryl oxidation or by irreversible proteolytic modification. Defects in xanthine dehydrogenase cause xanthinuria, may contribute to adult respiratory stress syndrome, and may potentiate influenza infection through an oxygen metabolite-dependent mechanism. [provided by RefSeq, Jan 2014]

Product images:



Circular map for RG219402