

Product datasheet for **SC300061**

Xanthine Oxidase (XDH) (NM_000379) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Xanthine Oxidase (XDH) (NM_000379) Human Untagged Clone
Tag:	Tag Free
Symbol:	Xanthine Oxidase
Synonyms:	XAN1; XO; XOR
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000379 edited
AACCTGTGACAATGACAGCAGACAAATTGGTTTTCTTTGTGAATGGCAGAAAGGTGGTGG
AGAAAAATGCAGATCCAGAGACAACCCTTTTGGCCTACCTGAGAAGAAAGTTGGGGCTGA
GTGGAACCAAGCTCGGCTGTGGAGAGGGGGCTCGGGGCTTGACAGTGATGCTCTCCA
AGTATGATCGTCTGCAGAACAAGATCGTCCACTTTTCTGCCAATGCCTGCCTGGCCCCA
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TCCAGGGCTTCCGGACCTTGGCAGGGATGGTGGATGCTGTGGAGGAGATGGGAATAATC
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TCAAGTTCTACCTGACAGTCCTTCAGAAGCTGGGCCAAGAGAACCTGGAAGACAAGTGTG
 GTAACCTGGACCCCACTTTCCGACAGTCAAACCTTACTGTTTCAGAAAGACCCCCAGCCG
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 GGCTGAGGTGGAGAGATCATTTGAGCTCAGGAGTTGAGGCTGCAGTGCATGATTGC
 GCCACTGCACCTCCTGCCTGAGCGACTGAGCAAGATCTTGTCTCTGAAGAAAAAAAAAA
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000379 unedited
 NNCCACGTTACCATTTGTCATACGACTCATATAGGCGGCCGCGNATTCAGATCTGGTAC
 CGAGCTCGGNATCCCTAGTAACGGCCAGTGTGCTGGAATTCGCCCTAACCTGTGAC
 AATGACAGCAGACAAATGGTTTTCTTTGTGAATGGCAGAAAGGTGGTGGAGAAAAATGC
 AGATCCAGAGACAACCCCTTTGGCCTACCTGAGAAGAAAGTTGGGGCTGAGTGGAAACCA
 GCTCGGCTGTGGAGAGGGGGCTGCGGGCTTGCACAGTGTGCTCTCAAGTATGATCG
 TCTGCAGAACAAGATCGTCCACTTTTCTGCCAATGCCTGCCTGGCCCCATCTGCTCCT
 GCACCATGTTGCAGTGACAACCTGTGGAAGGAATAGGAAGCACAAGACGAGGCTGCATCC
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 TCCGGACCTTTGGCCAAAGGGGATGGTGGATGCTGTGGAGGAGATGGGAAATATCCAAA
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 CCCCAAATGCTTGAAGCCTGAAAGAAACCTCCTCGGGAGCCACCTGCCAATTTAAAGGG
 AAACCTTGAAGTGTATACCAGGCTTTAACCTTAAGGGAAGTGGTGGAACTAC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000379 unedited
 TTGGGGTTCTTGGTGAGCAATCCCAGACCGCAAAGCACTGGGGCAGGGTACAGGT
 ATGCCACCGGGTCTGTTCAGGAAACAGCTATGACCGCGCCGAATCATATAGTCGAG
 TTTTTTTTTTTTTTTTTTTTCTCAAAGACAAGATCTTGCTCAGTCGCTCAGGCAGGAG
 TGCACTGGCCATTTCATAGCTCACTGACACCTCAAGCTCCTGAGCTCAAATGATCTCTCC
 GCCTAACCTTTCAAGTAGTTGGTACTACCTGCATGCGCTATGAAGACCATTTAATTTAA
 AAAATTTTTTTATAGACGGGATCTGTGTATGTTGCCAGGCTGGTCTTAAACTGCTGGG
 CTCAAGCAATTCCTGCCTTATCTCCCAAAGTGCCTGGTTTATTGGGGTGAACCACC
 TGCTGGACTGTTAACGTCAATTTCTATGGGAAATTAATTTGGTTTCGACTGTGAAGATT
 AAACACTGTCTCTTTGGAAATGCTCGGAGACTATTTGAAATACATTTTTCTCCTCTGA
 ACGGAAGGGAAAGATTGCTCCACTGTGCACGTGCTCAGTAATTGAGTCGGATGGATTC
 TGGATTAATGATNAGATAATCTTGCTTTATGACGCTTCACACTATACTATGCCTTCTACC
 TAGAATTGGATCTGCTCTATATCCTTTCCGATAGGAATCCCAATGGTCAATGGTTGAGA
 AGAATATATCCATTACCCGCTGCCCTCATTGGGTTAATTCGAGTATGCTTTCAAGGTTA
 TCGCTTCGCTAGTTATATGCCTTTGAAAGCCATGCTTCTCCCGGATGGGCCACGGGT
 TTCCAGTCTCTTGCCTTCAAATCTTTTTAAAAGGTCTGTTTGAATCG

Restriction Sites:

Please inquire

ACCN:

NM_000379

Insert Size:

5100 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation:	The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.
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]