

Product datasheet for **SC314151**

IMPDH1 (NM_000883) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IMPDH1 (NM_000883) Human Untagged Clone
Tag:	Tag Free
Symbol:	IMPDH1
Synonyms:	IMPD; IMPD1; IMPDH-I; LCA11; RP10; sWSS2608
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene ORF sequence for NM_000883 edited
 ATGGAGGGGCACTCACTCCACCACCGCTGCAGGGAGGCGGAGCCCGCTGTTCCGGAG
 CCCGGAGCCCGGCAACACCCGGGACACGAGACGGCGGCGCAGCGGTACAGCGCCCGACTG
 CTGCAGGCCGGCTACGAGCCCGAGAGCCCTAGATTGGACCTCGCTACACACCCGACGACA
 CCCCCTTCAGAACTATCTTCAGTGGTCTTACTGGCAGGTGTTGGTGTCCAGATGGATCGC
 CTTTCGACGGGCTAGCATGGCGGACTACCTGATCAGCGGCGGACCCGGCTACGTGCCCGAG
 GATGGGCTCACCGCCAGCAGCTCTTCGCCAGCGCCGACGGCCTCACCTACAACGACTTC
 CTGATTCTCCAGGATTCATAGACTTCATAGCTGATGAGGTGGACCTGACCTCAGCCCTG
 ACCCGGAAGATCACGCTGAAGACGCCACTGATCTCCTCCCCATGGACACTGTGACAGAG
 GCTGACATGGCCATTGCCATGGCTCTGATGGGAGGTATTGGTTTCATTACCACAACCTGC
 ACCCCAGAGTTCAGGCCAACGAGGTGCGGAAGGTCAAGAAGTTTGAACAGGGCTTCATC
 ACGGACCTGTGGTGCTGAGCCCTCGCACACTGTGGCGATGTGCTGGAGGCCAAGATG
 CGGCATGGCTTCTGTCATCCCATCACTGAGACGGGCACCATGGGCAGCAAGTGGTG
 GGCATCGTCACCTCCCGAGACATCGACTTCTTGTGAGAAGGACCACACCCTCCTC
 AGTGAGGTGATGACGCCAAGGATTGAAGTGGTGGTGGCTCCAGCAGGTGTGACGTTGAAA
 GAGGCAAATGAGATCCTGCAGCGTAGCAAGAAAGGGAAGCTGCCTATCGTCAATGATTGC
 GATGAGCTGGTGGCCATCATCGCCCGCACCGACCTGAAGAAGAACCAGACTACCCCTCTG
 GCCTCAAAGGATCCCAGAAGCAGCTGCTCTGTGGGCGAGCTGTGGGCACCCGTGAGGAT
 GACAAATACCGTCTGGACCTGCTCACCCAGGCGGGCGTCGACGTCATAGTCTTGGACTCG
 TCCAAGGGAATTCGGTGTATCAGATCGCCATGGTGCATTACATCAAACAGAAGTACCC
 CACCTCCAGGTGATTGGGGGAACGTGGTGACAGCAGCCAGGCCAAGAACCTGATTGAT
 GCTGGTGGACGGGCTGCGCGTGGCATGGGCTGCGGCTCCATCTGCATCACCCAGGAA
 GATGGCCTGTGGTGGCCCATCAGCCGATGGCGGCATCCAGACCGTGGGACACGTGGTCAAG
 GCCCTGGCCCTTGAGCCTCCACAGTGTGATGGGCTCCCTGCTGGCCGCACTACGGAG
 GCCCTGGCGAGTACTTCTTCTCAGACGGGGTGCAGGCTCAAGAAGTACCGGGCATGGGC
 TCACTGGATGCCATGGAGAAGAGCAGCAGCAGCCAGAAACGATACTTACGCGAGGGGGAT
 AAAGTGAAGATCGCRCAGGGTGTCTCGGGCTCCATCCAGGACAAAGGATCCATTGAGAAG
 TTCGTGCCCTACCTCATAGCAGGCATCCAACACGGCTGCCAGGATATCGGGGCCCGCAGC
 CTGTCTGTCTTCGGTCCATGATGTAAGTACTCAGGAGAGCTCAAGTTTGAGAAGCGGACCATG
 TCGGCCAGATTGAGGGTGGTCCATGGCCTGCACTCTTACGAAAAGCGGCTGTACTGA

5' Read Nucleotide Sequence: >OriGene 5' read for NM_000883 unedited
 TCGTACATTCCGGAGTTCGTGCCCTACCTCATAGCAGGCATCCAACACGGCTGCCAGGATA
 TCGGGGCCCGCAGCCTGTCTGTCTTCGGTCCATGATGTAAGTACTCAGGAGAGCTCAAGTTTG
 AGAAGCGGACCATGTGCGCCAGATTGAGGGTGGTGTCCATGGCTGCACTCTTACGAAA
 AGCGGTGTACTGAGGACAGCGGTGGAGCCGAGGTGGTGGAGGGGATGCACCCAGTGT
 CCACTTTTGGGCACAGCCTCCCTCCATAACTGAGTGGTCCACAGATTTGCACTACGGGTT
 CTCCAGCTCCTTTCCAGGCAGAGAGGAGGGGAGGTCTGAGGGGACTGCTGCCCCCTCACT
 CGGCATCCCTGCAGAGTCAGGACTGCTCCCGGGCCAGGCTGCCCTGGGAGCCCCCTC
 CGAGCCAGCCAGCCAGGCTCTCAGGCCCTGCGCCTGCCCTCAGGTCTTTCTTGTGCAGC
 CTGCTCCAGCCTGGCCCCACCCAGGGGAGGCGGCCCTCCTGGCTTCTCCTGTAGGG
 CACCTCCCTGCCCTAGCCTCCCAGGAAATGGTGTCTCCTGGCCCTGCCTCTGGCCCTT
 CCCGGGCCGCTGCCCTCAGCCATGTGGCACTTCTGAGCTCCTGACCTAGCCAAGGGGAG
 GTCTCTGCCCCCTCCCCGGCCCTGGGCTACCCTTGGGTCTGCTCCTCATGCCGCTCCC
 CTGTCCCTGGCCATGGGTAGGAGACTGCCCTGGTATGGCCCGCCTGCCTGTCATTCCCTG
 ACTCACACCGTCCCCAGGTGAACCATTCCTCCCTTCTCCTCAGCTGCAGTCGAAGCTTT
 AACTTTGCACACTTGATCACAGTTGCGTCATTGTGATATAAAATACTTGAATAAATCA
 ACCACGTTCTCA

Restriction Sites: Please inquire
ACCN: NM_000883

Insert Size:	2600 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_000883.2 , NP_000874.2
RefSeq Size:	2880 bp
RefSeq ORF:	1800 bp
Locus ID:	3614
UniProt ID:	P20839
Cytogenetics:	7q32.1
Domains:	CBS, IMPDH
Protein Families:	Druggable Genome
Protein Pathways:	Drug metabolism - other enzymes, Metabolic pathways, Purine metabolism
Gene Summary:	<p>The protein encoded by this gene acts as a homotetramer to regulate cell growth. The encoded protein is an enzyme that catalyzes the synthesis of xanthine monophosphate (XMP) from inosine-5'-monophosphate (IMP). This is the rate-limiting step in the de novo synthesis of guanine nucleotides. Defects in this gene are a cause of retinitis pigmentosa type 10 (RP10). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2008]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (a).</p>