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Product datasheet for SC117481

H6PD (NM_004285) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	H6PD (NM_004285) Human Untagged Clone
Tag:	Tag Free
Symbol:	H6PD
Synonyms:	CORTRD1; G6PDH; GDH; H6PDH
Mammalian Cell Selection:	None
Vector:	pCMV6-XL6
E. coli Selection:	Ampicillin (100 ug/mL)

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Fully Sequenced ORF:

>OriGene ORF sequence for NM_004285 edited
GGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCATTTAGGTGACACTATA
GAATACAAGCTACTTGTTCTTTTTGCAGCGGCCGCGAATCGGCACGAGGAGCCTTTTAAC
TGGCACCCAGGCATGTGGAATATGCTCATAGTGGCGATGTGCTTGGCCCTTCTGGGCTGC
CTGCAAGCCCAGGAGCTCCAGGGACATGTCTCCATAATCCTGCTGGGAGCAACTGGGGAC
CTGGCTAAGAAGTACTTATGGCAGGGACTGTTCCAGCTGTACCTGGATGAAGCGGGGAGG
GGTCACAGTTTTAGCTTCCATGGAGCTGCTCTGACAGCCCCCAAGCAGGGTCAAGAGCTC
ATGGCCAAGGCCCTGGAATCCCTCTCCTGCCCCAAGGACATGGCACCCAGTCACTGTGCA
GAGCACAAGGATCAGTTCCTGCAGCTGAGCCAGTACCGCCAACTGAAGACGGCCGAGGAC
TATCAGGCCCTGAACAAGGACATCGAGGCACAGCTCCAGCACGCAGGCCTCCGGGAGGCT
GGCAGGATCTTCTACTTCTCAGTGCCACCCTTCGCCTATGAAGACATTGCCCGCAACATC
AACAGTAGCTGCCGGCCAGGCCCGGGCGCCTGGCTGCGGGTTGTCCTTGAGAAACCCTTT
GGCCATGACCACTTCTCAGCCCAGCAGCTGGCCACAGAACTCGGGACCTTTTTCCAGGAG
GAGGAGATGTACCGGGTGGACCATTACTTAGGCAAGCAGGCTGTGGCGCAGATCCTGCCT
TTCCGAGACCAGAACCGCAAGGCTTTGGACGGCCTCTGGAACCGGCACCATGTGGAGCGG
GTGGAGATCATCATGAAAGAGACCGTGGATGCTGAAGGCCGCACCAGCTTCTATGAGGAG
TACGGTGTCATTCGCGACGTCCTCCAGAACCATCTGACGGAGGTCCTCACCCTCGTGGCC
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TTCCAGGCGCTGCGGGGCCTGCAGAGGGGCAGTGCCGTCGTGGGCCAGTACCAGTCTTAC
AGTGAGCAGGTGCGCAGAGAGCTGCAGAAGCCAGACAGCTTCCACAGCCTGACGCCGACC
TTCGCAGCCGTCCTAGTGCACATTGACAACCTTCGCTGGGAGGGCGTGCCTTTCATCCTG
ATGTCTGGCAAAGCCTTGGACGAGAGAGTGGGCTACGCTCGGATCTTGTTCAAGAACCAG
GCCTGCTGTGTGCAGAGCGAAAAGCACTGGGCCGCGGCGCAGAGCCAGTGCCTGCCCCGG
CAGCTCGTCTTCCACATCGGCCATGGCGACCTGGGCAGCCCTGCCGTGCTGGTCAGCAGG
AACCTGTTCAGGCCCTCCCTGCCCTCCAGCTGGAAGGAAATGGAGGGACCACCTGGGCTC
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GCCCACTCCGTCCTCTTATCCCATATCTTCCATGGCCGGAAGAATTTCTTCATCACCACA
GAGAACTTGCTGGCCTCCTGGAACTTCTGGACCCCTCTGCTGGAGAGCCTGGCCCATAAG
GCCCCACGCCTCTACCCTGGAGGAGCTGAGAATGGCCGTCTGTTGGACTTTGAGTTCAGT
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TCCGCCTGGTCCGAGGAGCTGATCTCTAAGCTGGCTAATGACATCGAGGCCACCGCTGTG
CGAGCCGTGCGGCGCTTTGGCCAGTTCCACCTGGCACTGTCGGGGGGCTCGAGCCCCGTG
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CAGGCCCACCTGCTGCAGCACGTCCGGATCCCCTACTACAACATCCACCCCATGCCTGTG
CACCTGCAGCAGCGGCTCTGCGCCGAGGAGGACCAGGGCGCCCAGATCTATGCCAGGGAG
ATCTCAGCCCTGGTGGCCAACAGCAGCTTCGACCTGGTGCTGCTGGGCATGGGTGCCGAC
GGGCACACAGCCTCCCTCTTCCCACAGTCACCCACTGGCCTGGATGGCGAGCAGCTGGTC
GTGCTGACCACGAGCCCCTCCCAGCCACACCGCCGCATGAGCCTTAGCCTGCCTCTCATC
AACCGCGCCAAGAAGGTGGCAGTCCTGGTCATGGGCAGGATGAAGCGTGAGATCACCACG
CTGGTGAGCCGGGTGGGCCATGAGCCCAAGAAGTGGCCCATCTCGGGTGTCCTGCCGCAC
TCCGGCCAGCTGGTGTGGTACATGGACTACGACGCCTTCCTGGGATGAGGGCGCCTGTGC
CCCTTGCCCGCTTCGCTCCTGTGCTTTCCTTCGCCCGTGTCTTCCCTCCCTTCTCGGCCC
CGCCACCTGCCCAGCGTGCCCTGGCTCTCCAGAACCTTCTATCCCACAGTCAGGCCCCAG
AGAGGGCAGGACAAGCCTTGTCCCGATGCCTTTGACCGGCAGCTCTGTGTATTGGTGGAT
AGATGCAGAAACAAGGAAGAAATGGAGTCTGCTCCTGAGAAGCTTCAAATTCAGGCCAGG
AGAGAAGTCTTAAGAAAAGACCTCCAGCAGTTACACATTCATATCAACCAGCACAACACG
GGATGGCGCCCAAACTCCGGCGTTCACAAGAGGAGACGTGACGTGGTGGGCTGAGGTTAA
TCAGGGAAGGTTTCCTGGGGGAGGTGATCCTTGAACTGGCTCCCGGGGAACATTCAGAGC
ATGATTGGTAGACAGAAGGGTGCAGAGGCGCCCAGGGGAGTACATTGCCCCGTGC

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_004285 unedited
CGCCCCGTTGCCGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCT
CATTTAGGTGACACTATAGAATACAAGCTACTTGTTCTTTTTGCAGCGGCCGCGAATCGG
CACGAGGAGCCTTTTAACTGGCACCCAGGCATGTGGAATATGCTCATAGTGGCGATGTGC
TTGGCCCTTCTGGGCTGCCTGCAAGCCCAGGAGCTCCAGGGACATGTCTCCATAATCCTG
CTGGGAGCAACTGGGGACCTGGCTAAGAAGTACTTATGGCAGGGACTGTTCCAGCTGTAC
CTGGATGAAGCGGGGAGGGGTCACAGTTTTAGCTTCCATGGAGCTGCTCTGACAGCCCCC
AAGCAGGGTCAAGAGCTCATGGCCAAGGCCCTGGAATCCCTCTCCTGCCCCAAGGACATG
GCACCCAGTCACTGTGCAGAGCACAAGGATCAGTTCCTGCAGCTGAGCCAGTACCGCCAA
CTGAAGACGGCCGAGGACTATCAGGCCCTGAACAAGGACATCGAGGCACAGCTCCAGCAC
GCAGGCCTCCGGGAGGCTGGCAGGATCTTCTACTTCTCAGTGCCACCCTTCGCCTATGAA
GACATTGCCCGCAACATCAACAGTAGCTGCCGGCCAGGCCCGGGCGCCTGGCTGCGGGTT
GTCCTTGAGAAACCCTTTGGCCATGACCACTTCTCAGCCCAGCAGCTGGCCACAGAAACT
CGGACCTTNTTCCAGNAGGAGGAGATGTACCCGGTGGACCATTACTTANNGCAGCAGGCT
GTGGCGCAGATCCTGCCTTTNCGAGACCAGACCGNCAGGCTNTGNACGGNCTCTGNAACC
NGCACATGTGNAGCGGNTGGAGNACATCATGAAAGAGACCGTGATGCTGAAGGCGCACAG
CTCTATGAGAGTACGTGTCATTCCGACGTCTCCAGACATCTGACGAGGTCTNACCTCGTG
GCTGNACTGCCACATGTCACATGCGGAGCTGGCTGG
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Restriction Sites: NotI-NotI

ACCN: NM_004285

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).

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_004285.3, NP_004276.2

RefSeq Size: 9117 bp

RefSeq ORF: 2376 bp

Locus ID: 9563

UniProt ID: O95479

Cytogenetics: 1p36.22

Domains: G6PD, Glucosamine_iso

Protein Pathways: Metabolic pathways, Pentose phosphate pathway

Gene Summary: There are 2 forms of glucose-6-phosphate dehydrogenase. G form is X-linked and H form, encoded by this gene, is autosomally linked. This H form shows activity with other hexose-6-phosphates, especially galactose-6-phosphate, whereas the G form is specific for glucose-6-phosphate. Both forms are present in most tissues, but H form is not found in red cells. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (2) uses an alternate 5' most exon compared to variant 1. The encoded isoform (2) has a shorter N-terminus compared to isoform 1.