

Product datasheet for **SC324295**

Hexokinase Type III (HK3) (NM_002115) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hexokinase Type III (HK3) (NM_002115) Human Untagged Clone
Tag:	Tag Free
Symbol:	Hexokinase Type III
Synonyms:	HKIII; HXK3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_002115.1
GGGTGCCTCATATTGCCAGACAAGAGCTCAGACCTGAGGAGAGTGACTAGCTTCTCTGTG
TCCCAGGTGGCCACCTTCCACTGTGGAAGCTCATGGACTCCATTGGGTCTTCAGGGTTGC
GGCAGGGGGAAGAAACCCTGAGTTGCTCTGAGGAGGGCTTGCCCGGGCCCTCAGACAGCT
CAGAGCTGGTGCAGGAGTGCCTGCAGCAGTTCAAGGTGACAAGGGCACAGCTACAGCAGA
TCCAAGCCAGCCTCTTGGGTTCCATGGAGCAGGCGCTGAGGGGACAGCCAGCCCTGCC
CTGCGGTCGGATGCTGCCTACATACGTGGGTCCACCCACATGGCACTGAGCAAGGAG
ACTTCGTGGTGTGGAGCTGGGGCCACAGGGCCTCACTGCGTGTGTTGTGGGTGACTC
TAACTGGCATTGAGGGGCATAGGGTGGAGCCAGAAGCCAGGAGTTTGTGATCCCCAAG
AGGTGATGCTGGGTGCTGGCCAGCAGCTCTTTGACTTTGTGCCACTGCCTGTCTGAGT
TCCTGGATGCGCAGCCTGTGAACAAACAGGGTCTGCAGCTTGGCTTCAGCTTCTCTTTCC
CTGTGCACAGACGGGCTTGGACAGGAGACCCTCATTTCTGGACCAAAGGTTTTAGGT
GCAAGTGGTGTGGAAGGCCAGGATGTGGTCCAGCTGCTGAGAGATGCCATTCGGAGGCAGG
GGGCTACAACATCGACGTGGTTGCTGTGGTGAACGACACAGTGGGCACCATGATGGGCT
GTGAGCCGGGGTTCAGGCCGTGTGAGGTTGGGCTAGTTGTAGACACGGGCACCAACGCGT
GTTACATGGAGGAGGCACGGCATGTGGCAGTGTGGACGAAGACCGGGCCGCGTCTGCG
TCAGCGTCGAGTGGGCTCCTTCAGCGATGATGGGGCGCTGGGACCAGTGTGACCACCT
TCGACCATACCCTGGACCATGAGTCCCTGAATCCTGGTGTCTCAGAGGTTTGAAGATGA
TCGGAGGCCTGTACCTGGGTGAGCTGGTGGGCTGGTGTGCTCACTTGGCCCGGTGTG
GGGTCTCTTTGGTGGCTGCACCTCCCCTGCCCTGCTGAGCCAAGGCAGCATCCTCCTGG
AACACGTGGCTGAGATGGAGGACCCCTCTACTGGGGCAGCCGTTCCATGCTATCCTGC
AGGACTTGGGCTGAGCCCTGGGCTTCGGATGTTGAGCTTGTGCAGCACGTCTGTGCGG
CCGTGTGCACGCGGGCTGCCAGCTCTGTGCTGCCGCCCTGGCCGCTGTTCTCTCCTGCC
TCCAGCACAGCCGGGAGCAACAACACTCCAGGTTGCTGTGGCCACCGGAGGCGGAGTGT
GTGAGCGGCACCCAGGTTCTGCAGCGTCTGCAGGGACAGTGTGCTCCTGGCCCCGG
AATGCGATGTCTCTTAATCCCCTCTGTGGATGGTGGTGGCCGGGAGTGGCGATGGTGA
CTGCTGTGGCTGCCGCTGGCTGCCACCGGCGCCTGCTGGAGGAGACCCTGGCCCCAT



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TCCGGTTGAACCATGATCAACTGGCTGCGGTTACGGCACAGATGCGGAAGGCCATGGCCA
 AGGGGCTCCGAGGGGAGGCCTCCTCCCTTCGCATGCTGCCCACTTTCGTCCGGGGCCACCC
 CTGATGGCAGCGAGCGAGGGGATTTCTGGCCCTGGACCTCGGGGGCACGAACTCCCGTG
 TCCTCCTGGTACGTGTGACCACAGGCGTGCAGATCACCAGCGAGATCTACTCCATCCCCG
 AGACTGTGGCCAGGGTCTGGGCAGCAGCTCTTGACCACATCGTGGACTGCATCGTGG
 ACTTCCAGCAGAAGCAGGGCCTGAGCGGGCAGAGCCTCCCACTGGGTTTTACCTTCTCCT
 TCCCATGTAGGCAGCTTGGCCTAGACCAGGGCATCCTCCTGAACCTGGACCAAGGGTTTTCA
 AGGCATCAGACTGCGAGGGCCAAGATGTCGTGAGTCTGTTGCGGGAAGCCATCACTCGCA
 GACAGGCAGTGGAGCTGAATGTGGTTGCCATTGTCAATGACACGGTGGGACCATGATGT
 CCTGTGGCTATGAGGACCCCGTTGCGAGATAGGCCTCATTGTCGGAACCGGCACCAATG
 CCTGCTACATGGAGGAGCTCCGGAATGTGGCGGGCGTGCCTGGGACTCAGGCCGCATGT
 GCATCAACATGGAGTGGGGCGCCTTTGGGGACGATGGCTCTCTGGCCATGCTCAGCACCC
 GCTTTGATGCAAGTGTGGACCAGGCGTCCATCAACCCGGCAAGCAGAGGTTTAAAAGA
 TGATCAGCGGCATGTACCTGGGGGAGATCGTCCGCCACATCCTTTTACATTTAACAGCC
 TTGGCGTTCTCTCCGGGGCCAGCAGATCCAGCGCCTTCAGACCAGGGACATCTTCAAGA
 CCAAGTTCCTCTCTGAGATCGAAAGTGACAGCCTGGCCCTGCGGCAGGTCGAGCCATCC
 TAGAGGATCTGGGGCTACCCCTGACCTCAGATGACGCCCTGATGGTGTAGAGGTGTGCC
 AGGCTGTGTCCCAGAGGGCTGCCAGCTCTGTGGGGCGGGTGTAGCTGCCGTGGTGGAGA
 AGATCCGGGAGAACCAGGGCCTGGAAGAGCTGGCAGTGTCTGTGGGGGTGGATGGAACGC
 TCTACAAGCTGCACCCCGCCTTCTCCAGCCTGGTGGCGGCCACAGTGGGGAGCTGGCCC
 CTCGCTGTGTGGTACGTTCTGCAGTCAAGGATGGGTCCGGCAAAGGTGCGGCCCTGG
 TCACCGCTGTTGCCTGCCGCCTTGCGCAGTTGACTCGTGTCTGAGGAACTCCAGGCTG
 AGGAGTCTCCGCCAGCCTTGCTGGAGCCGGTGGGGTCTGCCTGTTCCAGCCAG
 GCGCCAGCCAGGACTCCTGGGACATCCCATGTGTGACCCCTGCGGCCATTTGGCC
 TTGCTCCCTGGCTTCCCTGAGAGAAGTAGCACTCAGGTTAGCAATATATATATAATT
 TATTTAAAAAAA

- Restriction Sites:** Please inquire
- ACCN:** NM_002115
- 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:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_002115.1](#), [NP_002106.1](#)

RefSeq Size:	3062 bp
RefSeq ORF:	2772 bp
Locus ID:	3101
UniProt ID:	P52790
Cytogenetics:	5q35.2
Domains:	hexokinase
Protein Families:	Druggable Genome
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism, Galactose metabolism, Glycolysis / Gluconeogenesis, Insulin signaling pathway, Metabolic pathways, Starch and sucrose metabolism, Type II diabetes mellitus
Gene Summary:	Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most glucose metabolism pathways. This gene encodes hexokinase 3. Similar to hexokinases 1 and 2, this allosteric enzyme is inhibited by its product glucose-6-phosphate. [provided by RefSeq, Apr 2009]