

## Product datasheet for **SC110919**

### 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:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_002115, the custom clone sequence may differ by one or more nucleotides

```
ATGGA CTCCATTGGGTCTTCAGGGTTGCGGCAGGGGGAAGAAACCCTGAGTTGCTCTGAGGAGGGCTTGC
CCGGGCCCTCAGACAGCTCAGAGCTGGTGCAGGAGTGCCTGCAGCAGTTCAAGGTGACAAGGGCACAGCT
ACAGCAGATCCAAGCCAGCCTCTTGGGTTCCATGGAGCAGGCGCTGAGGGGACAGGCCAGCCTGCCCT
CGGGTCCGGATGCTGCCTACATACGTGGGGTCCACCCACATGGCACTGAGCAAGGAGACTTCGTGGTGC
TGGAGCTGGGGGCCACAGGGCCTCACTGCGTGT TTTGTGGTGACTCTAACTGGCATTGAGGGGCATAG
GGTGGAGCCAGAAGCCAGGAGTTGTGATCCCCCAAGAGGTGATGCTGGGTGCTGGCCAGCAGCTCTTT
GACTTTGCTGCCACTGCCTGTCTGAGTTCCTGGATGCGCAGCCTGTGAACAAACAGGGTCTGCAGCTTG
GCTTCAGTCTCTTTCCCTTGTACCAGACGGGCTTGGACAGGAGCACCTCATTTCTGGACCAAAGG
TTTTAGGTGCAGTGGTGTGAAGGCCAGGATGTGGTCCAGCTGCTGAGAGATGCCATTGGAGGCAGGGG
GCCTACAACATCGACGTGGTGTGTGGTGAACGACACAGTGGGCACCATGATGGGCTGTGAGCCGGGGG
TCAGGCCGTGTGAGGTTGGGCTAGTTGTAGACACGGGCACCAACGCGTGTACATGGAGGAGGCACGGCA
TGTGGCAGTGTGGACGAAGACCGGGGCGCGTCTGCGTCAAGCTGAGTGGGGCTCCTTCAAGCATGAT
GGGGCGCTGGGACCAGTGTGACCACCTTCGACCATAACCTGGACCATGAGTCCCTGAATCCTGGTGCTC
AGAGGTTTGAGAAGATGATCGGAGGCCTGTACCTGGGTGAGCTGGTGC GGCTGGTGTGCTGCTCACTTGGC
CCGGTGTGGGGTCTCTTTGGTGGCTGCACCTCCCCTGCCCTGCTGAGCCAAGGCAGCATCCTCCTGGAA
CACGTGGCTGAGATGGAGGACCCTCTACTGGGGCAGCCCGTGTCCATGCTATCCTGCAGGACTTGGGCC
TGAGCCCTGGGGCTTCGGATGTTGAGCTGTGCAGCACGTCTGTGCGGCCGTGTGCACGCGGGCTGCCCA
GCTCTGTGTGCCACCGGAGGCCAGTGTGTGAGCGGCACCCAGGTTCTGCAGCGTCTTGCAGGGGACAG
TGATGCTCCTGGCCCGAATGCGATGTCTCCTTAATCCCTCTGTGGATGGTGGTGGCCGGGAGTGGC
GATGGTGACTGCCGTGGCTGCCGCTGCTGCTGCCACCGCGCCTGCTGGAGGAGACCCTGGCCCCATTC
CGGTTGAACCATGATCAACTGGCTGCGGTTGAGGCACAGATGCGGAAGGCCATGGCCAAGGGGCTCCGAG
GGGAGGCCTCCTCCCTTCGATGCTGCCACTTTCGTCCGGGCCACCCCTGACGGCAGCGAGCGAGGGGA
TTTCTGGCCCTGGACCTCGGGGCACGAACCTCCGTGTCTCCTGTTACGTGTGACCACAGGCGTGACG
ATCACCAGCGAGATCTACTCCATTCGAGACTGTGGCCAGGGTCTGGGCAGCAGCTCTTTGACCACA
TCGTGGACTGCATCGTGGACTTCCAGCAGAAGCAGGGCCTGAGCGGGCAGAGCCTCCCACTGGGTTTTAC
CTTCTCCTTCCCATGTAGGCAGCTTGGCCTAGACCAGGGCATCCTCCTGAACTGGACCAAGGGTTTCAAG
GCATCAGACTGCGAGGGCCAAGATGTCGTGAGTCTGTTGCGGGAAGCCATCACTCGCAGACAGGCAGTGG
AGCTGAATGTGGTTGCCATTGTCAATGACACGGTGGGGACCATGATGTCCTGTGGCTATGAGGACCCCCG
TTGCGAGATAGGCCTCATTGTGCGAACCAGGCACCAATGCCTGCTACATGGAGGAGCTCCGGAATGTGGCG
GGCGTGCTGGGGACTCAGGCCGATGTGCATCAACATGGAGTGGGGCGCCTTTGGGGACGATGGCTCTC
TGGCCATGCTCAGCACCCGCTTTGATGCAAGTGTGGACCAGGCGTCCATCAACCCCGCAAGCAGAGGTT
TGAAAAGATGATCAGCGGCATGTACCTGGGGGAGATCGTCCGCCACATCCTTTTACATTTAACAGCCTT
GGCGTTCTTCCGGGGCCAGCAGATCCAGCGCCTTCCAGACCAGGACATCTTCAAGACCAAGTTCTCT
CTGAGATCGAAAAGTGACAGCCTGGCCCTGCGGCAGGTCGAGCCATCCTAGAGGATCTGGGGCTACCCCT
GACCTCAGATGACGCCCTGATGGTGTAGAGGTGTGCCAGGCTGTGTCCAGAGGCTGCCAGCTCTGT
GGGGCGGGTGTAGCTGCCGTGGTGGAGAAGATCCGGGAGAACCAGGGCCTGGAAGAGCTGGCAGTGTCTG
TGGGGGTGGATGGAACGCTCTACAAGCTGCACCCGCGCTTCTCCAGCCTGGTGGCGGCCACAGTGCGGGA
GCTGGCCCTCGCTGTGTGGTACGTTCTGCAGTCAAGGATGGGTCCGGCAAAGGTGCGGCCCTGGTC
ACCGCTGTGCTGCCGCTTGGCAGTTGACTCGTGTCTGA
```

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_002115 unedited  
 AGGTTACTATTTGTATACGACTCATATAGGCGGCCCGGAATTCGCACGAGGGGCCTCAT  
 ATTGCCAGACAAGAGCTCAGACCTGAGGAGAGTGACTAGCTTCTCTGTGTCCCAGGTGGC  
 CACCTTCCACTGTGGAAGCTCATGGACTCCATTGGGTCTTCAGGGTTGCCGCAGGGGAA  
 GAAACCTGAGTTGCTCTGAGGAGGGCTTGCCCGGCCCTCAGACAGCTCAGAGCTGGTG  
 CAGGAGTGCCTGCAGCAGTTCAAGGTGACAAGGGCACAGCTACAGCAGATCCAAGCCAGC  
 CTCTTGGGTTCCATGGAGCAGGCGCTGAGGGGACAGGCCAGCCCTGCCCTGCGGTCCGG  
 ATGCTGCCTACATACGTGGGGTCCACCCACATGGCACTGAGCAAGGAGACTTCGTGGTG  
 CTGGAGCTGGGGGCCACAGGGCCCTCACTGCGTGTGTTTGTGGGTGACTCTAACTGGCATT  
 GAGGGGCATAGGGTGGAGCCAGAAGCCAGGAGTTGTGATCCCCAAGAGGTGATGCTG  
 GGTGCTGGCCAGCAGCTCTTGACTTTGCTGCCACTGCCTGTCTGAGTTCCTGGATGCG  
 CAGCCTGTGAACAAACAGGGTCTGCAGCTTGGCTTCACTTCTCTTTCCCTTGTCAACAG  
 ACGGGCTTGGACAGGAGCACCTCATTTCTGGACAAAGGTTTTAAGTGCAGTGGTGTG  
 GAAGGCCAAGATGTGGTCCAAGTCTGAGAAGATGCCATTCGAGGCAGGGGGCCTACAAC  
 ATCGACGTGGTTGCTGCGGTGAACGACACATGGGCACCATGATGGGCTGTGAGCCGGGG  
 CCAAGCCCGTGAGTTGGGCTACTTGTACACCGGGCACCCAGCCTGTTACATGGAGGAG

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_002115 unedited  
 GCGGCACGCAATCTAGAATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT  
 TTTTTTATGGACACAGACCTTGCCCGGCCCGGGGCACATAGGGGTTTTATCGGGCGT  
 GAATGTAATAAATTATATATATATATTGCTAACCTGAGTGTACTTTTTCTCAGGGAAAG  
 CCAGGGAGCAAGCCAAATGGCCGCAAAGGGGTACACATGGGATGTCCAAGAGTCCTG  
 GGTGGCTGGGCTGGCTGGGAAACAGGCAAACCCGACCCGGCTCCAGCAAGGCTGGGGG  
 GGAAACCTCCTCAACCTGGAGGTTTCTCAAACACGAGTCAACTGCGCAAGGCGGCAGGC  
 AACAGCGGTGACCAGGGCCGACCTTTGCCGGACCCATCCTTTGACTGCAGGAACGTGAC  
 CACACAGCGAGGGGCCAGCTCCCGCACTGTGGCCGCCACCAGGCTGGAAAAGTCAACCGG  
 GGTGCAGCTTGTAAAGCGTTCCATCCACCCACAGACTGCCAGCTTTTCCAGGCCCC  
 GGTCTCCCGGATCTTCTCCACCAGGCAGCTACACCCGCCCCACAGAGCTGGGCAGCCC  
 TCTGGGACACAGCCTGGCACACCTCTAGCACCATCAGGGCGTCATCTGAGAGTCAGGGGT  
 AGCCCCAGATCCTTAGGATGGCTCGGACCTGCCGACGGGCCAGNCTGTCACTTTTCGATC  
 TCAGAGAGGAACCTTGGTCTTGAATAATGTCCTGGTCTGAAGCGCTGNATCTGCNTGCCCC  
 CGNAAGAAACGCCNCAGCTGGTTAAATGTAAAAGATGTTGCGGGGATCTCCCCAGTACA  
 TGCCGCTGATATCTTTCAAACCTCTGCTGCCGGNTGATGGACCCCTGTTCCAACCTTGC  
 ATCAAAGNCGGGCTGAGCATGGCCANAAACCATCGTCCCAAAGCCCCCATTTCATGT  
 GATGCCAT

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_002115

**Insert Size:**

3570 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).

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_002115.1</a> , <a href="#">NP_002106.1</a>
<b>RefSeq Size:</b>	3062 bp
<b>RefSeq ORF:</b>	2772 bp
<b>Locus ID:</b>	3101
<b>UniProt ID:</b>	<a href="#">P52790</a>
<b>Cytogenetics:</b>	5q35.2
<b>Domains:</b>	hexokinase
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	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
<b>Gene Summary:</b>	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]