

## Product datasheet for **SC314351**

### Histidine decarboxylase (HDC) (NM\_002112) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Histidine decarboxylase (HDC) (NM_002112) Human Untagged Clone
Tag:	Tag Free
Symbol:	Histidine decarboxylase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >SC314351 representing NM\_002112.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGATCGCC
ATGATGGAGCCTGAGGAGTACAGAGAGAGAGGGAGAGAGATGGTGGATTACATCTGCCAGTACCTGAGC
ACTGTGCCGGGAGAGACGTGTGACGCCAGACGTGCAGCCTGGCTACCTGCGAGCCCAGCTGCCTGAGAGT
GCTCCTGAGGACCCCGACAGCTGGGACAGCATCTTTGGGGACATTGAACGAATCATCATGCCTGGGGTG
GTACATTGGCAGAGCCCCATATGCACGCCTACTACCCAGCCCTCACCTCTTGGCCCTCCCTGCTAGGA
GACATGCTGGCTGATGCCATCAACTGCTTGGGATTACCTGGGCATCCAGCCCTGCGTGTACAGAGCTG
GAGATGAACGTCACTGGACTGGTTGGCAAAAATGCTGGGACTTCCAGAGCACTTCTTGACCACCACCCC
AGCAGCCAGGGCGGAGGCGTCTGCAGAGCACGGTCAGTGAATCCACTTTGATTGCCCTGCTGCCAGCA
AGGAAGAACAATACTGGAAAATGAAAACGTCTGAGCCCGATGCTGATGAGTCTGCCTAAATGCCCGA
CTCGTGGCCTATGCCTCTGACCAGGCTCACTCCTCTGTGAAAAGGCTGGTTTGATTCCCTTGTGAAG
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GACAAGCAGCGGGGCTTGGTGCCCGTCTTTGTCTGTGCAACACTAGGGACCCTGGGGTCTGTGCATTT
GACTGCCTGTGAGAGCTGGGCCCATCTGTGCCCGTGAGGGGCTGTGGCTCCACATCGATGCTGCTTAT
GCAGGCACTGCCTTCTGTGCCCGAGTTCGGGGGTTTCTGAAGGGGATTGAGTATGCCGACTCCTTC
ACCTTTAATCCTTCCAAGTGGATGATGGTGCAATTTTACTGTACTGGGTTCTGGGTCAAGGACAAGTAC
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TTCGGGGTGAAGAATCTCAAGCACATGTCAGACATGGTACTGAAATGGCTAAATATTTTGAATCTCTG
GTCAGAAAACGACCCTTCCCTTTGAAATTCCTGCCAAGAGGCACCTTGGCCTGGTGGTTTTTTCGTCTAAG
GGTCCTAATTGTCTCACAGAAAATGTGTTAAAGGAAATAGCTAAAGCTGGCCGCTCTTCCATCCCG
GCCACTATCCAGGACAAGTTAATCATCCGTTTCACTGTGACATCCAGTTTACCACTAGGGATGACATC
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AGCCCTCGGGTTGGGAACCTCATCTCCCAAATCAGGGGTGCCAGAGCCTGGGCCTGTGGAACGTCCCTT
CAGTCTGTGAGTGGGCAGGAGATGATCCAGTCCAGGCCAGGAAGATCATCAAGCAGCCTCAGCGTGTG
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CAGACTAAGAAGAAGACGGTGCCTCCCTCAGTTGCAACAGTGTGCCAGTGTGCTCAGAAGCCACTG
CCCACAGAGGCCCTCTGTGAAGAATGGGGCTCCTCCAGGGTCAAGATCTTTCCAGGTTTCCAGAAGAC
ATGATGATGCTGAAGAAAAGTGCCTTCAAAAACTCATCAAAATTCTACAGCGTCCCAGCTTTCTGAA
TGCAGCTCTCAATGTGGACTCCAGCTGCCTGTTGCCCTCTGCAGGCCATGGTTTAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
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**Restriction Sites:** Sgfl-Mlul  
**ACCN:** NM\_002112  
**Insert Size:** 1989 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>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.</p>
<b>Components:</b>	<p>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).</p>
<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_002112.3</a>
<b>RefSeq Size:</b>	2646 bp
<b>RefSeq ORF:</b>	1989 bp
<b>Locus ID:</b>	3067
<b>UniProt ID:</b>	<a href="#">P19113</a>
<b>Cytogenetics:</b>	15q21.2
<b>Domains:</b>	pyridoxal_deC
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Histidine metabolism, Metabolic pathways
<b>MW:</b>	74.1 kDa

**Gene Summary:**

This gene encodes a member of the group II decarboxylase family and forms a homodimer that converts L-histidine to histamine in a pyridoxal phosphate dependent manner. Histamine regulates several physiologic processes, including neurotransmission, gastric acid secretion, inflammation, and smooth muscle tone. [provided by RefSeq, Aug 2010]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).