

## Product datasheet for RC232708

### HCP1 (SLC46A1) (NM\_001242366) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HCP1 (SLC46A1) (NM\_001242366) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** SLC46A1  
**Synonyms:** G21; HCP1; PCFT  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC232708 representing NM\_001242366  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGAGGGGAGCGCGAGCCCCCGAAAAGCCCCGCGCCCGCCCTGCGGCTGCCGTGTGCCGGGGCC  
 CGGTAGAGCCGCTGGTCTTCTGGCCAACCTTGCCTTGGTCTGCAGGGCCGCTCACCACGAGTATCT  
 GTGGCACCCTTACGCGCCGACCTCGGCTACAATGGCACCCGCAAGGGGGGGTGCAGCAACCCGAGC  
 GCGGACCCACCATGCAGGAAGTGAGACCCCTACCTCCCACTGGACCCTCTACATGAACGTGGGCGGT  
 TCTTGGTGGGCTCTTCTCGTCCACCCTGCTGGGAGCTTGGAGCGACAGTGTGGGCCGCCCGCCGCTGT  
 AGTGTGGCCTCGCTGGGCTGTGCTCCAGGCCCTAGTGTCCGTTTTGTGGTGCAGCTGCAGTCCAC  
 GTCGGCTACTTCGTGCTGGGTCGCATCCTTTGTGCCCTCCTCGGCGACTTCGGTGGCCTTCTGGCTGTA  
 GCTTTGCGTCCGTGGCAGATGTCAGTCCAGTCGAGCCGACCTTCCGGATGGCCCTGCTGGAAGCCAG  
 CATCGGGTGGCTGGGATGCTGGCAAGCCTCCTCGGGGCCACTGGCTCCGGGCCAGGGTTATGCCAAC  
 CCCTTCTGGCTGGCCTTGGCCTTGCTGATAGCCATGACTCTCTATGCAGCTTTCTGCTTTGGTGAGACCT  
 TAAAGGAGCCAAAGTCCACCCGGCTCTTACGTTCCGTACCAGCATCCATTGTCAGCTCTATGTGGC  
 TCCCGCCCAGAGAAGTCCAGGAAACATTTAGCCCTCTACTCACTGGCCATCTTCTGGTGTACTGTG  
 CACTTTGGGGCCAGGACATCTTAACCCCTTATGAACTAAGCACACCCCTCTGCTGGGACTCCAAACTAA  
 TCGGCTATGGTTCTGCAGCTCAGCATCTCCCTACCTCACCAGCCTGCTGGCCCTGAAGCTCCTGCAGTA  
 CTGCTGGCCGATGCCTGGGTAGCTGAGATCGGCTGGCCTTCAACATCCTGGGGATGGTGGTCTTTGCC  
 TTTGCCACTATCACGCCTCTCATGTTACAGGTGCTCTCTTTTCTGCTGTGGCCTGTGTAATAGCCTGG  
 CCATGCTGACGGCCTCCGCATCTCAACTCACTCTACCCAGCCACTCTGAACCTTATGAAGGGGTTC  
 CTCTCTCTGGGAGCTGGCCTCCTGCTCATCCCGCTGTTCTGATTGGGATGCTGAAAAGGCTGATCCT  
 CACCTCGAGTTCAGCAGTTTCCCCAGAGCCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC232708 representing NM\_001242366  
 Red=Cloning site Green=Tags(s)

MEGSASPPEKPRARPAAVLCRGPVEPLVFLANFALVLQGPLTTQYLWHRFSADLGYNGTRQRGGCSNRS  
 ADPTMQEVETL TSHWTL YMNVGGLVGLFSSTLLGAWSDSVGRRPLLVLASLGLLLQALVSFVVLQLH  
 VGYFVLGRILCALLGDFGGLLAASFASVADVSSRSRFRMALLEASIGVAGMLASLLGGHWLRAQGYAN  
 PFWLALALLIAMTLYAFCFGETLKEPKSTRLF TFRHRSIVQL YVAPAPEKSRKHLALYSLAIFVVITV  
 HFGAQDILTLYELSTPLCWDSKLIYGSAQAHLPLYL TSLALAKLLQYCLADAWVAEIGLAFNILGMVFA  
 FATITPLMFTGALFSAVACVNSLAML TASGIFNSLYPATLNFMKGFPFLGAGLLLI PAVLIGMLEKADP  
 HLEFQQFPQSP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

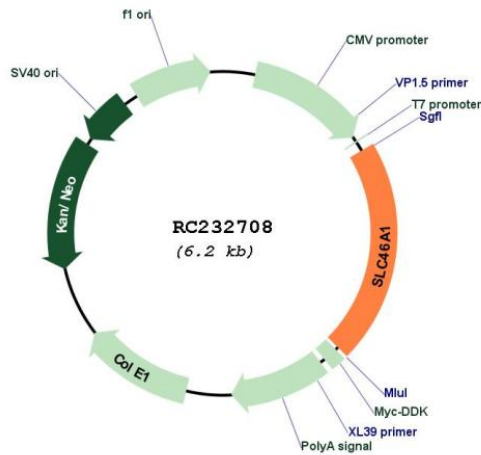
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001242366

<b>ORF Size:</b>	1293 bp
<b>OTI Disclaimer:</b>	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>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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_001242366.3</a>
<b>RefSeq Size:</b>	6426 bp
<b>RefSeq ORF:</b>	1296 bp
<b>Locus ID:</b>	113235
<b>UniProt ID:</b>	<a href="#">Q96NT5</a>
<b>Cytogenetics:</b>	17q11.2
<b>Protein Families:</b>	Transmembrane
<b>MW:</b>	47.1 kDa
<b>Gene Summary:</b>	This gene encodes a transmembrane proton-coupled folate transporter protein that facilitates the movement of folate and antifolate substrates across cell membranes, optimally in acidic pH environments. This protein is also expressed in the brain and choroid plexus where it transports folates into the central nervous system. This protein further functions as a heme transporter in duodenal enterocytes, and potentially in other tissues like liver and kidney. Its localization to the apical membrane or cytoplasm of intestinal cells is modulated by dietary iron levels. Mutations in this gene are associated with autosomal recessive hereditary folate malabsorption disease. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Aug 2013]