**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for RC203197

## CHPF (NM_024536) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | CHPF (NM_024536) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | CHPF |
| **Synonyms:** | CHSY2; CSS2 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC203197 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGGGCATCGCTGCTGCTGTCGGTGCTGCGGCCCGCAGGGCCCGTGGCCGTGGGCATCTCCCTGGGCT
TCACCCTGAGCCTGCTCAGCGTCACCTGGGTGGAGGAGCCGTGCGGCCCAGGCCCGCCCCAACCTGGAGA
CTCTGAGCTGCCGCCGCGCGGCAACACCAACGCGGCGCGCCGGCCCAACTCGGTGCAGCCCGGAGCGGAG
CGCGAGAAGCCCGGGGCCGGCGAAGGCGCCGGGGAGAATTGGGAGCCGCGCGTCTTGCCCTACCACCCTG
CACAGCCCGGCCAGGCCGCCAAAAAGGCCGTCAGGACCCGCTACATCAGCACGGAGCTGGGCATCAGGCA
GAGGCTGCTGGTGGCGGTGCTGACCTCTCAGACCACGCTGCCCACGCTGGGCGTGGCCGTGAACCGCACG
CTGGGGCACCGGCTGGAGCGTGTGGTGTTCCTGACGGGCGCACGGGGCCGCCGGGCCCCACCTGGCATGG
CAGTGGTGACGCTGGGCGAGGAGCGACCCATTGGACACCTGCACCTGGCGCTGCGCCACCTGCTGGAGCA
GCACGGCGACGACTTTGACTGGTTCTTCCTGGTGCCTGACACCACCTACACCGAGGCGCACGGCCTGGCA
CGCCTAACTGGCCACCTCAGTCTGGCCTCCGCCGCCCACCTGTACCTGGGCCGGCCCCAGGACTTCATCG
GCGGAGAGCCCACCCCCGGCCGCTACTGCCACGGAGGCTTTGGGGTGCTGCTGTCGCGCATGCTGCTGCA
ACAACTGCGCCCCCACCTGGAAGGCTGCCGCAACGACATCGTCAGTGCGCGCCCTGACGAGTGGCTGGGT
CGCTGCATTCTCGATGCCACCGGGGTGGGCTGCACTGGTGACCACGAGGGGGTGCACTATAGCCATCTGG
AGCTGAGCCCTGGGGAGCCAGTGCAGGAGGGGGACCCTCATTTCCGAAGTGCCCTGACAGCCCACCCTGT
GCGTGACCCTGTGCACATGTACCAGCTGCACAAAGCTTTCGCCCGAGCTGAACTGGAACGCACGTACCAG
GAGATCCAGGAGTTACAGTGGGAGATCCAGAATACCAGCCATCTGGCCGTTGATGGGGACCGGGCAGCTG
CTTGGCCCGTGGGTATTCCAGCACCATCCCGCCCGGCCTCCCGCTTTGAGGTGCTGCGCTGGGACTACTT
CACGGAGCAGCACGCTTTCTCCTGCGCCGATGGCTCACCCCGCTGCCCACTGCGTGGGGCTGACCGGGCT
GATGTGGCCGATGTTCTGGGGACAGCTCTAGAGGAGCTGAACCGCCGCTACCACCCGGCCTTGCGGCTCC
AGAAGCAGCAGCTGGTGAATGGCTACCGACGCTTTGATCCGGCCCGGGGTATGGAATACACGCTGGACTT
GCAGCTGGAGGCACTGACCCCCCAGGGAGGCCGCCGGCCCCTCACTCGCCGAGTGCAGCTGCTCCGGCCG
CTGAGCCGCGTGGAGATCTTGCCTGTGCCCTATGTCACTGAGGCCTCACGTCTCACTGTGCTGCTGCCTC
TAGCTGCGGCTGAGCGTGACCTGGCCCCTGGCTTCTTGGAGGCCTTTGCCACTGCAGCACTGGAGCCTGG
TGATGCTGCGGCAGCCCTGACCCTGCTGCTACTGTATGAGCCGCGCCAGGCCCAGCGCGTGGCCCATGCA
GATGTCTTCGCACCTGTCAAGGCCCACGTGGCAGAGCTGGAGCGGCGTTTCCCCGGTGCCCGGGTGCCAT
GGCTCAGTGTGCAGACAGCCGCACCCTCACCACTGCGCCTCATGGATCTACTCTCCAAGAAGCACCCGCT
GGACACACTGTTCCTGCTGGCCGGGCCAGACACGGTGCTCACGCCTGACTTCCTGAACCGCTGCCGCATG
CATGCCATCTCCGGCTGGCAGGCCTTCTTTCCCATGCATTTCCAAGCCTTCCACCCAGCTGTGGCCCCAC
CACAAGGGCCTGGGCCCCCAGAGCTGGGCCGTGACACTGGCCGCTTTGATCGCCAGGCAGCCAGCGAGGC
CTGCTTCTACAACTCCGACTACGTGGCAGCCCGTGGGCGCCTGGCGGCAGCCTCAGAACAAGAAGAGGAG
CTGCTGGAGAGCCTGGATGTGTACGAGCTGTTCCTCCACTTCTCCAGTCTGCATGTGCTGCGGGCGGTGG
AGCCGGCGCTGCTGCAGCGCTACCGGGCCCAGACGTGCAGCGCGAGGCTCAGTGAGGACCTGTACCACCG
CTGCCTCCAGAGCGTGCTTGAGGGCCTCGGCTCCCGAACCCAGCTGGCCATGCTACTCTTTGAACAGGAG
CAGGGCAACAGCACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC203197 protein sequence
Red=Cloning site Green=Tags(s)

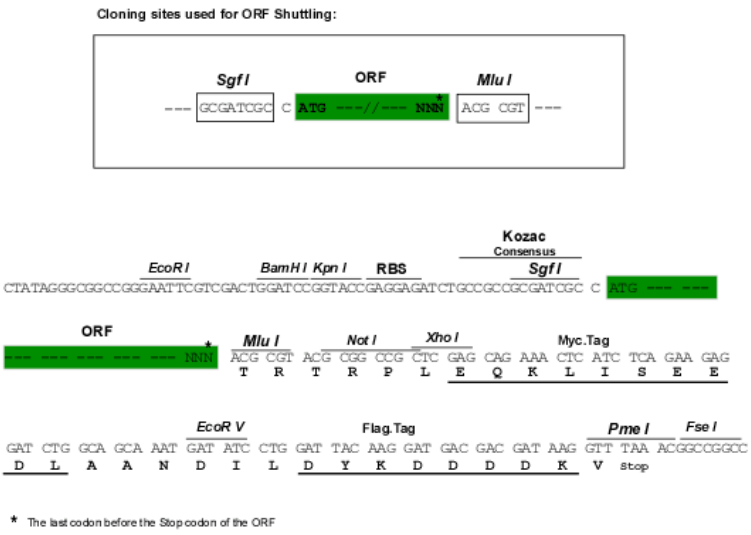
MRASLLLSVLRPAGPVAVGISLGFTLSLLSVTWVEEPCGPGPPQPGDSELPPRGNTNAARRPNSVQPGAE
REKPGAGEGAGENWEPRVLPYHPAQPGQAAKKAVRTRYISTELGIRQRLLVAVLTSQTTLPTLGVAVNRT
LGHRLERVVFLTGARGRRAPPGMAVVTLGEERPIGHLHLALRHLLEQHGDDFDWFFLVPDTTYTEAHGLA
RLTGHLSLASAAHLYLGRPQDFIGGEPTPGRYCHGGFGVLLSRMLLQQLRPHLEGCRNDIVSARPDEWLG
RCILDATGVGCTGDHEGVHYSHLELSPGEPVQEGDPHFRSALTAHPVRDPVHMYQLHKAFARAELERTYQ
EIQELQWEIQNTSHLAVDGDRAAAWPVGIPAPSRPASRFEVLRWDYFTEQHAFSCADGSPRCPLRGADRA
DVADVLGTALEELNRRYHPALRLQKQQLVNGYRRFDPARGMEYTLDLQLEALTPQGGRRPLTRRVQLLRP
LSRVEILPVPYVTEASRLTVLLPLAAAERDLAPGFLEAFATAALEPGDAAAALTLLLLYEPRQAQRVAHA
DVFAPVKAHVAELERRFPGARVPWLSVQTAAPSPLRLMDLLSKKHPLDTLFLLAGPDTVLTPDFLNRCRM
HAISGWQAFFPMHFQAFHPAVAPPQGPGPPELGRDTGRFDRQAASEACFYNSDYVAARGRLAAASEQEEE
LLESLDVYELFLHFSSLHVLRAVEPALLQRYRAQTCSARLSEDLYHRCLQSVLEGLGSRTQLAMLLFEQE
QGNST

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/mk6202_g08.zip

**Restriction Sites:** SgfI-MluI

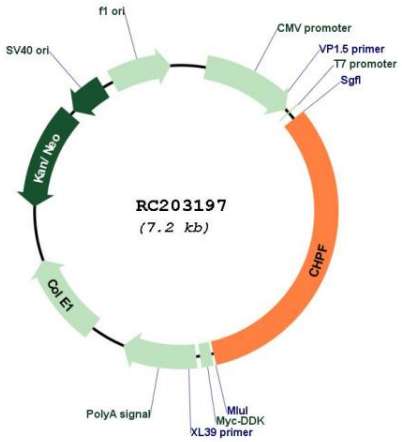
**Cloning Scheme:**



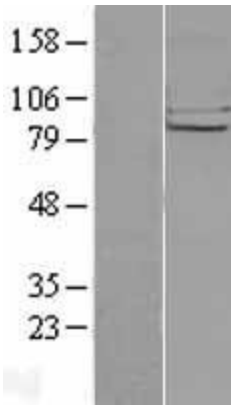

| | |
|---|---|
| **ACCN:** | NM_024536 |
| **ORF Size:** | 2325 bp |
| **OTI Disclaimer:** | The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (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. More info |
| **OTI Annotation:** | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. |
| **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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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. |
| **Note:** | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required. |
| **RefSeq:** | NM_024536.4, NP_078812.2 |
| **RefSeq Size:** | 3013 bp |
| **RefSeq ORF:** | 2328 bp |
| **Locus ID:** | 79586 |
| **UniProt ID:** | Q8IZ52 |
| **Cytogenetics:** | 2q35 |
| **Protein Families:** | Druggable Genome |
| **Protein Pathways:** | Chondroitin sulfate biosynthesis, Metabolic pathways |
| **MW:** | 85.5 kDa |
| **Gene Summary:** | Has both beta-1,3-glucuronic acid and beta-1,4-N-acetylgalactosamine transferase activity. Transfers glucuronic acid (GlcUA) from UDP-GlcUA and N-acetylgalactosamine (GalNAc) from UDP-GalNAc to the non-reducing end of the elongating chondroitin polymer. Isoform 2 may facilitate PRKN transport into the mitochondria. In collaboration with PRKN, isoform 2 may enhance cell viability and protect cells from oxidative stress.[UniProtKB/Swiss-Prot Function] |

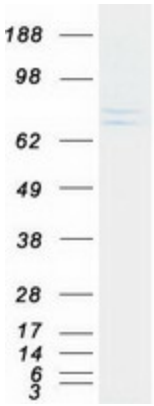
## Product images:




Circular map for RC203197




Western blot validation of overexpression lysate (Cat# [LY403000]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203197 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).




Coomassie blue staining of purified CHPF protein (Cat# [TP303197]). The protein was produced from HEK293T cells transfected with CHPF cDNA clone (Cat# RC203197) using MegaTran 2.0 (Cat# [TT210002]).