

Product datasheet for RR211471

Ptch1 (NM_053566) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ptch1 (NM_053566) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ptch1
Synonyms: Ptch; Ptch2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR211471 representing NM_053566
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCCTCGGCTGGTAACGCCGCCGGGGCCCTGGGCAGGCAGGCCGGCGGGAGGCGCAGACGGACCG
 GGGGACCCGACCCGCGCCGACCCGACCCGGACCCGGGACTATCTGCACCCGGCCAGCTACTGCGACGCCCTTCGC
 TCTGGAGCAGATTTCAAGGGGAAGGCTACTGGCCGAAAGCGCCGCTGTGGCTGAGAGCGAAGTTTCAA
 AGACTCTTATTTAACTGGTTGTACATTCAAAGAAGCTGCGGCAAGTTTTGGTTGTGGGTCTCCTCA
 TATTTGGGCTTCGCTGTGGGATTAAGGCAGCTAATCTCGAGACCAACGTGGAGGAGCTGTGGGTGGA
 AGTTGGTGGACGAGTGAAGTAAATTATACCCGCCAGAAGATAGGAGAAGAGGCTATGTTAAT
 CCTCAACTCATGATTCAGACTCCAAAAGAAGAAGGCGCTAATGTCTGACCACAGAGGCCCTACTACAAC
 ACCTGGACTCAGCACTCCAGGCCAGCCGTGTGCACGTCTACATGTATAACAGGCAATGGAAGTTGGAACA
 TTTATGCTACAAATCAGGGGAAGTATCACAGAGACAGGCTACATGGATCAGATAATAGAATACCTTTAC
 CTTGCTTAATCATTACACCTTTGGACTGCTTCTGGGAAGGGCAAAGCTACAGTCCGGGACAGCGTACC
 TCCTAGGTAAGCCTCCTTACGGTGGACAACTTTGACCCCTTGAATTCCTAGAAGAGTTAAAGAAAAT
 AAATAACCAAGTGGACAGTTGGGAGGAAATGCTGAATAAAGCCGAAGTTGGCCATGGGTACATGGACCGG
 CCTTGCCTCAATCCAGCCGACCCAGATTGCCCTGCCACAGCCCCAACAAAAATCAACCAACCTCTTG
 ATGTGGCCCTTGTGTTGAACGGTGGATGTCAAGGTTTATCCAGGAAGTATATGCATTGGCAGGAGGAGTT
 GATTGTGGGTGGCACCCTCAAGAACGCCACTGAAAGCTGTGACGCGCTCATGCCCTGCAAACCATGTTT
 CAGTTAATGACTCCCAAGCAAATGTATGAACACTTCAGGGGCTACGACTATGTCTCTCACATCAACTGGA
 ATGAGGATAGGGTGGCCCATCCTGGAGGCATGGCAGAGGACTACGTGGAGGTGGTTCATCAAAGTGT
 TGCCCCAACTCCACTCAAAGGTGCTTTCCTTACCACCACGACCCCTGGACGACATCTAAAATCCTTC
 TCTGATGTCAGTGTCCGAGTGGCCAGTGGCTACCTACTGATGCTTGCCTACGCTGTAAACCATGC
 TGGCCTGGGACTGCTCAAGTCCAGGGTGGCCGTGGGGTGGCTGGTGTCTGTTGGTTGCACTGTCAAGT
 GGCTGCAGGATTGGGCTCTGCTCCTTGATTGGCATTTCCTTAAATGCTGCAACAACTCAGGTTTTGCCA
 TTTCTTGCCTTGGTGTGGTGTGGACGAGCTTTCTCTCGCCATGCATTAGTGAACGGGACAGA



[View online >](#)

ATAAGAGGATTCCATTTGAGGACAGGACTGGGGAGTGCCTCAAGCGCACGGGAGCCAGCGTGGCCCTCAC
CTCCATCAGCAATGTCAGTGCCTTCTTCATGGCTGCATTAATCCCTATTCTGCAGTGCAGCGTCTCC
CTCCAGGCTGCTGTGGTGGTGGTATTCAATTTTGCATGGTTCTACTCATTTTCCCTGCAATTCTCAGCA
TGGATTTATACAGACGTGAGGACAGAAGATTGGATATTTTCTGCTGTTTCAACAAGCCCTGTGTACAGCCG
GGTGATTCAAGTTGAACCGCAGGCTACACAGAGCCTCATAGTAACACCCGGTACAGCCCCCACCCTCCG
TACAGCAGCCACAGCTTCGCCCATGAAACCCACATCACCATGCAGTCCACCGTTCAGTCCGCACAGAAT
ATGACCCTCACACACAGTCTACTACACCACCGCCGAGCCGCGCTCTGAGATCTCTGTACAGCCTGTAC
CATCACCCAGGACACCCTCAGCTGTGAGAGCCCTGAGAGCACCAGTTCCACCCGGGACCTGCTTTCTCAA
TTCTCTGACTCCAGCCTCCACTGCCTTGAGCCCCCTGCACCAAGTGGACACTTTCTTCTTTGAGAGA
AGCACTACGCTCCTTTCTCTTGAGACCCAAAGCCAAGTTGTGGTAATCCTTCTTTTCTGGGCTGTCT
GGGCGTACGCTTTATGGGACCACCCGAGTGAGAGACGGGCTGGACCTCACGGACATTGTCCCCGGGAA
ACCAGAGAATATGACTTCATAGCTGCCAGTTCAGTACTTCTTTCTACAACATGTATATAGTACCC
AGAAAGCAGACTACCAAATATCCAACACCTGCTTACGACCTTCATAAGAGTTTCAGCAGTGTGAAGTA
TGTGATGCTGGAGGAGAACAAGCAACTTCCCAAATGTGGCTGCATTACTTTAGAGACTGGCTCCAAGGA
CTTCAGGATGCATTTGACAGTACTGGGAAACCGGGAGGATCATGCCAAACAATTAAAAATGGATCTG
ATGATGGGGTCTCGCTTACAACTCCTGGTGCAGACTGGCAGCCGAGACAAGCCATCGACATTAGTCA
GTTGACTAAACAGCGTCTGGTGGACGCAGATGGCATCATTAAATCCGAGCGCTTCTACATCTACCTGACC
GCTTGGGTGAGCAATGACCCTGTAGCTTACGCTGCCTCCCAGGCCAACATCCGGCCTCACAGACCAGAGT
GGGTGCACGACAAAGCTGACTACATGCCAGAGACCAGGCTGAGAAATCCCAGCAGCAGAGCCCATAGAGTA
CGCTCAGTTCCCTTTCTACCTCAACGGCTACGGGACACCTCAGACTTTGTGGAAGCCATAGAAAAAGTG
AGAGTCATCTGTAAACATACACGAGTCTGGGGCTGTCCAGTACCCCAATGGCTACCCCTTCTGTTCT
GGGAGCAGTACATCAGCTGCGTCACTGGCTGTGCTAGCCATCAGCGTGGTGTGGCCTGCACATTTCT
AGTGTGCGCAGTCTTCTCCTGAACCCCTGGACGGCCGGGATCATTGTGATGGTCTGGCTTTGATGACC
GTTGAGCTCTTCGCGATGATGGGCTCATTGGGATCAAGCTGAGTGTGCGCGTGGTATCCTGATTG
CGTCTGTTGGCATTGGAGTAGAATTCACCGTCCACGTGGCTTTGGCCTTCTGACAGCCATTGGGACAA
GAACCACAGGGCTATGCTCGCCCTGGAGCAGATGTTGCTCCTGTTCTGGACGGTGTGTGCCACTCTG
CTGGGTGACTGATGCTTGGGGATCCGAATTTGACTTATTGTCAGATACTTCTTTGCGCTCCTGGCCA
TCCTCACCGTCTTGGGAGTTCTCAACGGACTGGTCTGCTGCCTGTACTTATCCTTCTCGGACCATG
TCCTGAGGTGTCTCCAGCCAACGGCTAAACCGGCTGCCACTCCTTCGCTGAGCCGCCCCAAGCGTC
GTCCGGTTTGGCGTGCCTCCTGGTACACGAACAATGGGTCTGATTCTCCGACTCCGAGTACAGCTCTC
AGACCACGGTGTCTGGCATCAGTGAAGGCTCAGGCACTATGAAGCACAGCAGGGCACCGGAGGTCTGTC
CCACCAAGTGATTGTGGAAGCCACAGAAAACCCGCTTTGCCCCGTCCACTGTGGTGCATCCTGACTCC
AGACATCAGCCTCCCTTGAACCTCTCGGCAACAGCCCCACCTGGACTCTGGCTCCCTGTCCCTGGACGGC
AAGGCCAGCAGCCTCGAAGGGATCCCCCAGAGAAGGCTTGGCCACACCCCTACAGACCAGCGCAGAGA
CGCTTTTGAATTTCTACTGAAGGGCATTCTGGCCCTAGCAATAGGGACCGCTCGGGCCCCATGGGGCC
CGTTCTCACAAACCTCGGAACCAACGTCCACTGCCATGGGCAGCTCTGTGCCAGCTACTGCCAGCCTA
TCACCAGTGTGACGGCTCCGCTTCTGTAAGTGTGCTGTGCACCCCACTGGACCTGGGCGCAACCC
CCGAGGGGGACCTGTCCAGGCTACGAGAGCTACCCCGAGACTGATCACGGGTGTTGAGGATCCCCAT
GTGCCTTTTATGTCAGGTGTGAGAGGAGGACTCGAAGGTGGAGTTATAGAATACAGGACGTGGAGT
GTGAGGAGAGCCGTGGGGGAGCAGCTCCAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR211471 representing NM_053566
 Red=Cloning site Green=Tags(s)

```
MASAGNAAGALGRQAGGRRRRRTGGPHRAAPDRDYLHRPSYCDAFALEQISKGKATGRKAPLWLRKAFQ
RLLFKLGCYIQKNCGKFLVVGLLIFGAFVGLKAANLETNVEELWVEVGGGRVSRELNYTRQKIGEEAMFN
PQLMIQTPKEEGANVLTTEALLQHLDSALQASRVHVYMYNRQWLEHLCKYKSGELITETGYMDQIIEYLY
PCLIIITPLDCFWEGAKLQSGTAYLLGKPLRWTNFDPLEFLEELKKINYQVDSWEEMLNKAEVGHGYMDR
PCLNPADPDCPATAPKNSTKPLDVALVLNGGCQGLSRKYMHWQEELIVGGTVKNATGKLVSAHALQTMF
QLMTPKQMYEHFRGYDYVSHINWNEDRAAAILEAWQRTYVEVHQSVA PNSTQKVL SFTTTTLDLILKSF
SDVSIVIRVASGYLLMLAYACLMLRWDCSKSQGAVGLAGVLLVALSVAAGLGLCSLIGISFNAATTQVLP
FLALGVGVDDVFLLAHAFSETGQNKRI PFEDRTGECLKRTGASVALTSISNVTAFFMAALIPALRAFS
LQA AVVVVFN FAMVLLIFPAILSMDLYRREDRRLDIFCCFTSPCVSRVIQVEPQAYTEPHSNTRYSPPPP
YSSHSFAHETHITMQSTVQLRTEYDPHTHVYTTAEPRSEISVQPVITITQDTLSCQSPESTSSTRDLSQ
FSDSSLHCLEPPCTKWTLSSFAEKHYAPFLLRPKAKVVVILLFLGLLGVSLYGTTRVRDGLDLTDIVPRE
TREYDFIAAQFKYFSFYNYIIVTQKADYPNIQHLLYDLHKSFSVYVMLEENKQLPQMWLHYFRDWLQG
LQDAFSDSWETGRIMPNNYKNGSDDGVLAYKLLVQTGSRDKPIDISQLTKQRLVDADGIINPSAFYIYLT
AWVSNDPVAYAASQANIRPHRPEVWHDKADYMPETRLRIPAAEPIEYAQFPFYLNGLRDTSDFVEAIEKV
RVICNNYTSLGLSSYPNGYPFLFWEQYISLRHWLLLAISVVLACTFLVCAVFLNPNWTAGIIMVLALMT
VELFGMMLIGIKLSAVPVVILIASVGI GVEFTVHVALAFLTAIGDKNHRAMLAL EHMFAVPLDGA VSTL
LGVLMLAGSEDFIVRYFFAVLAILTVLGVNLGLVLLPVLLSFFGPCPEVSPANGLNRLPTSPPEPPSV
VRFVAVPPGHTNNGSDSSDSEYSSQTTVSGISEELRHVEAQGTGGPAHQVIVEATENPVFARSTVVHPDS
RHQPPLNSRQQPHLDSGSLSPGRQGGQPRRDPREGLRPPPYRPRRDAFEISTEGHSGPSNRDRSGPHGA
RSHNPRNPTSTAMGSSVPSYCQPIITVTASASVTVAVHPPPGPRNPRGGPCPGYESYPE TDHGVFEDPH
VPFHVRCERRDSKVEVIELQDVECEERPWGSSSN
```

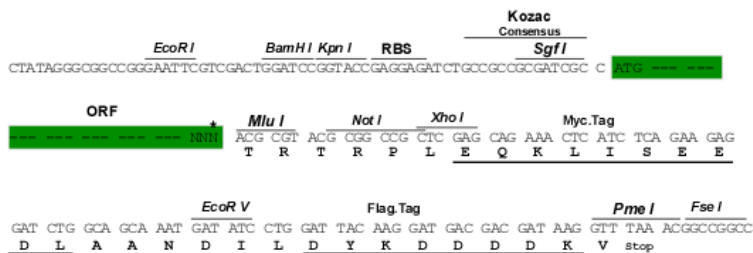
TRTRPLEQKLISEEDLAANDILDYKDDDDK

Restriction Sites:

Sgfl-MluI

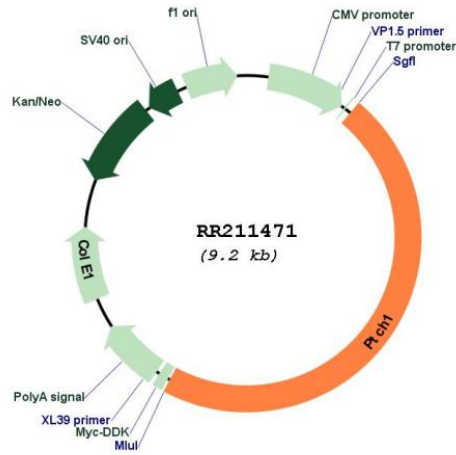
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_053566

ORF Size: 4302 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.
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_053566.1](#), [NP_446018.1](#)

RefSeq Size: 4305 bp

RefSeq ORF: 4305 bp

Locus ID: 89830

Cytogenetics: 17p14

MW: 159.3 kDa

Gene Summary: human homolog acts as a receptor for sonic hedgehog [RGD, Feb 2006]