

Product datasheet for **MG227010**

Ptch1 (NM_008957) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ptch1 (NM_008957) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ptch1
Synonyms:	A230106A15Rik; mes; Ptc; Ptc1; Ptch; wig
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG227010 representing NM_008957 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCTCGGCTGGTAACGCCGCCGGGGCCCTGGGCAGGCAGGCCGGCGGGAGGCGCAGACGGACCG
GGGGACCCGACCCGCGCCGCGCCGACCGGGACTATCTGCACCGGCCAGCTACTGCGACGCCGCCTTCGC
TCTGGAGCAGATTTCCAAGGGGAAGGCTACTGGCCGAAAGCGCCGCTGTGGCTGAGAGCGAAGTTTCAG
AGACTCTATTTAACTGGTGTACATTCAAAGAAGTGCAGCAAGTTTTGGTTGTGGTCTCCTCA
TATTTGGGCCTTCGCTGTGGATTAAGGCAGCTAATCTCGAGACCAACGTGGAGGAGCTGTGGTGGA
AGTTGGTGACGAGTGAGTCGAGAAATAAATTATACCCGTCAGAAGATAGGAGAAGAGGCTATGTTAAT
CCTCAACTCATGATACAGACTCCAAAAGAAGAAGCGCTAATGTTCTGACCACAGAGGCTCTCCTGCAAC
ACCTGGACTCAGCACTCCAGGCCAGTCGTGTGCACGTCTACATGTATAACAGGCAATGGAAGTTGGAACA
TTTGTGCTACAAATCAGGGGAATTATCACGGAGACAGTTACATGGATCAGATAATAGAATACCTTTAC
CCTTGCTTAATCATTACACCTTTGGACTGCTTCTGGGAAGGGGCAAGCTACAGTCCGGGACAGCATACC
TCCTAGGTAAGCCTCCTTACGGTGGACAACTTTGACCCCTTGGAAATCCTAGAAGAGTTAAAGAAAAT
AACTACCAAGTGACAGCTGGGAGGAAATGCTGAATAAAGCCGAAGTTGGCCATGGGTACATGGACCGG
CCTTGCCCAACCCAGCCGACCCAGATTGCCCTGCCACAGCCCTAACAAAAATCAACCAACCTCTTG
ATGTGGCCCTTGTGTAATGGTGGATGTCAAGGTTTATCCAGGAAGTATATGCATTGGCAGGAGGATT
GATTGTGGGTGGTACCGTCAAGAATGCCACTGGAAAATTTGTCAGCGCTCACGCCCTGCAAAACCATGTT
CAGTTAATGACTCCCAAGCAAATGTATGAACACTTCAGGGCTACGACTATGTCTCTCACATCAACTGGA
ATGAAGACAGGGCAGCCGCCATCCTGGAGGCTGGCAGAGGACTTACGTGGAGGTGGTTCATCAAAGTGT
CGCCCCAACTCCACTCAAAGGTGCTTCCCTTACAACCAGCACCCTGGACGACATCTAAAATCCTTC
TCTGATGTCAGTGCATCCGAGTGGCCAGCGGCTACCTACTGATGCTTGCCTATGCCTGTTAAACCATGC
TGCCTGGGACTGCTCAAAGTCCAGGGTCCCGTGGGGCTGGCTGGCGTCTGTTGGTTGCCTGTCAGT
GGCTGCAGGATTGGCCCTGCTCCTTGATTGGCATTCTTTAATGCTGCGACAACCTCAGTTTTGCC



[View online »](#)

TTTCTTGCTCTTGGTGTGGTGTGGATGATGTCTTCTCCTGGCCATGCATTAGTGAACAGGACAGA
ATAAGAGGATTCCATTTGAGGACAGGACTGGGGAGTGCCTCAAGCGCACCCGAGCCAGCGTGGCCCTCAC
CTCCATCAGCAATGTCACCGCCTTCTTCATGGCCGATTGATCCCTATCCCTGCCCTGCGAGCGTTCTCC
CTCCAGGCTGCTGGTGGTGGTATTCAATTTTGTATGGTTCTGCTCATTTTTCTGCAATTCAGCA
TGGATTTATACAGACGTGAGGACAGAAGATTGGATATTTTCTGCTGTTTACAAGCCCTGTGTACAGCAG
GGTGATTCAAGTTGAGCCACAGGCTACACAGAGCCTACAGTAACACCCGGTACAGCCCCCACCCTCA
TACACCAGCCACAGCTTCGCCCACGAAACCCATATCACTATGCAGTCCACCGTTCAGCTCCGACAGAGT
ATGACCCCTCACACGCACGTGTACTACACCACCGCCGAGCCAGCTCTGAGATCTCTGTACAGCCTGTAC
CGTCACCCAGGACAACCTCAGCTGTGAGAGTCCCAGAGACACCAGCTCTACCAGGGACCTGCTCTCCAG
TTCTCAGACTCCAGCCTCCACTGCCTCGAGCCCCCTGCACCAAGTGGACTCTCTTCTGTTGAGAGA
AGCACTATGCTCCTTCTCCTGAAACCCAAAGCCAAGTTGTGGTAATCCTTCTTTCTGGGCTTGTCT
GGGGTACAGCCTTATGGGACCACCCGAGTGAGAGACGGGCTGGACCTCACGGACATTGTTCCCGGGAA
ACCAGAGAATAGACTTCATAGCTGCCAGTTCAGTACTTCTCTTTCTACAACATGTATATAGTACCC
AGAAAGCAGACTACCCGAATATCCAGCACCTACTTACGACCTTCATAAGAGTTTCAGCAATGTGAAGTA
TGTCATGCTGGAGGAGAACAAGCAACTTCCCAAATGTGGCTGCACTACTTTAGAGACTGGCTTCAAGGA
CTTCAGGATGCATTTGACAGTACTGGGAACTGGGAGGATCATGCCAAACAATATAAAAATGGATCAG
ATGACGGGGTCTCGCTTACAACTCCTGGTGCAGACTGGCAGCCGAGACAAGCCATCGACATTAGTCA
GTTGACTAAACAGCGTCTGGTAGACGCAGATGGCATATTAATCCGAGCGCTTTCTACATCTACCTGACC
GCTTGGGTGAGCAACGACCCTGTAGCTTACGCTGCCTCCAGGCCAACATCCGGCCTCACCGGCCGAGT
GGGTCCATGACAAAGCCGACTACATGCCAGAGACCAGGCTGAGAAATCCAGCAGCAGAGCCCATCGAGTA
CGCTCAGTTCCTTTCTACCTCAACGGCCTACGAGACCTCAGACTTTGTGGAAGCCATAGAAAAAGTG
AGAGTCATCTGTAACAATAACGAGCCTGGGACTGTCCAGTACCCCAATGGCTACCCCTTCTGTTCT
GGGAGCAATACATCAGCCTGCCACTGGCTGCTGCTATCCATCAGCGTGGTGTGCTGCAGCAGTTTCT
AGTGTGCGCAGTCTTCTCCTGAACCCCTGGACGGCCGGGATCATTGTCATGGTCTGCTGCTGATGACC
GTTGAGCTCTTTGGCATGATGGGCTCATTGGGATCAAGCTGAGTGTGCTGTGCCTGTGGTATCCTGATTG
CATCTGTTGGCATCGGAGTGGAGTTCACCGTCCACGTGGCTTTGGCCTTCTGACAGCCATTGGGGACAA
GAACCACAGGGCTATGCTCGCTCGGAGACATGTTTGTCCCGTCTGGACGGTGTGTGCTCACTCTG
CTGGGTGACTGATGCTTGCAGGGTCCGAATTTGATTTTATTGTCAGATACTTCTTTGCCGCTCGGCCA
TTCTCACCGTCTTGGGGTCTCAATGGACTGGTCTGCTGCCTGTCTTATCCTTCTTTGGACCGTG
TCCTGAGGTGTCTCCAGCAATGGCCTAAACCGACTGCCACTCCTTCGCTGAGCCGCCTCCAAGTGTCT
GTCCGGTTTGGCCTGCCTCCTGGTACACGAACAATGGGTCTGATTCCTCCGACTCGGAGTACAGCTCTC
AGACCACGGTGTCTGGCATCAGTGAGGAGCTCAGGCAATACGAAGCACAGCAGGGTGCCGGAGGCCCTGC
CCACCAAGTGATTGTGGAAGCCACAGAAAACCTGTCTTTGCCCGGTCCACTGTGGTCCATCCGGACTCC
AGACATCAGCCTCCCTTGACCCCTCGGCAACAGCCCCACCTGGACTCTGGCTCCTTGTCCCTGGACGGC
AAGGCCAGCAGCCTCGAAGGGATCCCCCTAGAGAAGGCTTGGCCACACCCCTACAGACCAGCCGAGAGA
CGTTTTTGAATTTCTACTGAAGGGCATTCTGGCCCTAGCAATAGGGACCGCTCAGGGCCCCGTGGGGCC
CGTTCTACAACCCTCGGAACCAACGTCCACCGCCATGGGCAGCTCTGTGCCAGCTACTGCCAGCCCA
TCACCACTGTGACGGCTTCTGCTTCGGTACTGTTGCTGTGCATCCCCCGCTGGACCTGGGCGCAACCC
CCGAGGGGGCCCTGTCCAGGCTATGAGAGTACCCTGAGACTGATCACGGGGTATTTGAGGATCCTCAT
GTGCCTTTTTCATGTCAGGTGTGAGAGGAGGGACTCAAAGGTGGAGGTATAGAGCTACAGGACGTGGAAT
GTGAGGAGAGGCCGTGGGGGAGCAGCTCCAAC

ACCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

Protein Sequence: >MG227010 representing NM_008957
 Red=Cloning site Green=Tags(s)

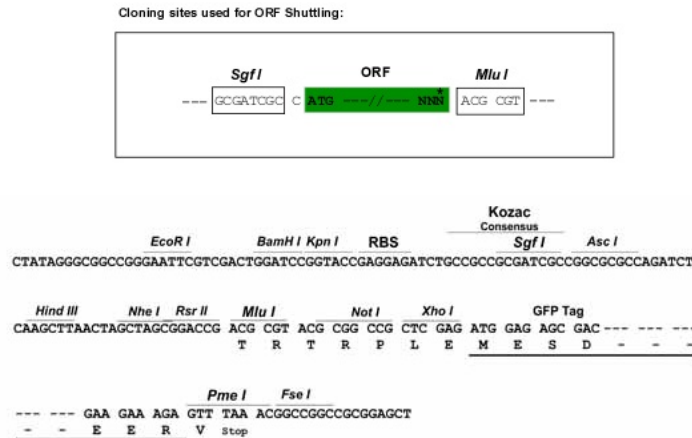
```
MASAGNAAGALGRQAGGRRRRRTGGPHRAAPDRDYLHRPSYCDAFALEQISKGKATGRKAPLWLRKAFQ
RLLFKLGCYIQKNCCKFLVVGLLIFGAFVGLKAANLETNVEELWVEVGGGRVSRELNTRYTRQKIGEEAMFN
PQLMIQTPKEEGANVLTTEALLQHLDLQASRVHVMYMNQWLEHLCKYKSGELITETGYMDQIIEYLY
PCLIIITPLDPCFEGAKLQSGTAYLLGKPLRWTNFDPLEFLEELKKINYQVDSWEEMLNKAEVGHGYMDR
PCLNPADPDCPATAPNKNSTKPLDVALVLNGGCQGLSRKYMHWQEELIVGGTVKNATGKLVSAHALQTMF
QLMTPKQMYEHFRGYDYVSHINWNEDRAAAILEAWQRTYVEVHVQSVAPNSTQKVLPTTTTTLDDILKSF
SDVSVIRVASGYLLMLAYACLMLRWDCSKSQGAVGLAGVLLVALSVAAGLGLCSLIGISFNAATTQVLP
FLALGVGVDDVFLLAHAFSETGQNKRIPIFEDRTGECLKRTGASVALTSISNVTAFMAALIPALRAFS
LQAASVVVFNAMVLLIFPAILSMDLYRREDRRLDIFCCFTSPCVSRVIQVEPQAYTEPHSNTRYSPPPP
YTSHSFAHETHITMSTVQLRTEYDPHTHVYYTTAEPRSEISVQPVTVTQDNLSCQSPESTSSTRDLLSQ
FSDSSLHCLPEPCKWTLSSFAEKHYAPFLKPKAKVVVILLFLGLLGVSLYGTTRVRDGLDLTDIVPRE
TREYDFIAAQFKYFSFYNNYIVTQKADYPNIQHLLYDLHKFSNVKYVMLEENKQLPQMWLHYFRDWLQG
LQDAFSDSWETGRIMPNNYKNGSDDGVLAYKLLVQTGSRDKPIDISQLTKQRLVDADGIINPSAFYIYLT
AWVSNDPVAYAASQANIRPHRPEVWHDKADYMPETRLRIPAAEPIEYAQFPFYLNGLRDTSDFVEAIEKV
RVICNNYTSGLSSYPNGYPFLFWEQYISLRHWLILLSISVVLACTFLVCAVFLNPNWTAGIIMVLALMT
VELFGMMLIGIKLSAVPVVILIASVGIQVEFTVHVALAFLTAIGDKNHRAMLALAHMFAPVLDGAVSTL
LGVLMLAGSEFDIVRYFFAVLAILTVLGVNLGLVLLPVLLSFFGPCPEVSPANGLNRLPTSPPEPPSV
VRFVPPGHTNNGSDSSDSEYSSQTTVSGISEELROYEAQQGAGGPAHQVIVEATENPVFARSTVVHPDS
RHQPPLTPRQQPHLDSGSLSPGRQGGQPRRDPPREGLRPPPYRPRRDAFEISTEGHSGPSNRDRSGPRGA
RSHNPRNPTSTAMGSSVPSYCQPIITVTASASVTVAHVPPPGPRNPRGGPCPGYESYPETDHGVFEDPH
VPFHVRCERRDSKVEVIELQDVECEERPWGSSSN
```

TRTRPLE - GFP Tag - V

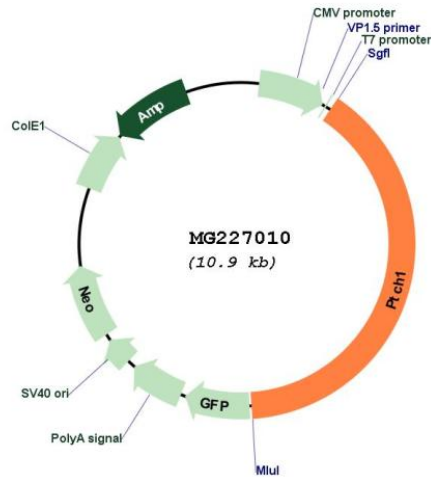
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_008957

ORF Size: 4302 bp

OTI Disclaimer: 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 custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<ol style="list-style-type: none">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_008957.3
RefSeq Size:	4305 bp
RefSeq ORF:	4305 bp
Locus ID:	19206
UniProt ID:	Q61115
Cytogenetics:	13 32.8 cM
Gene Summary:	Acts as a receptor for sonic hedgehog (SHH), indian hedgehog (IHH) and desert hedgehog (DHH). Associates with the smoothed protein (SMO) to transduce the hedgehog's proteins signal. Seems to have a tumor suppressor function, as inactivation of this protein is probably a necessary, if not sufficient step for tumorigenesis.[UniProtKB/Swiss-Prot Function]