

## Product datasheet for MR227010

### Ptch1 (NM\_008957) Mouse Tagged ORF Clone

#### Product data:

|                           |                                                                             |
|---------------------------|-----------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                         |
| Product Name:             | Ptch1 (NM_008957) Mouse Tagged ORF Clone                                    |
| Tag:                      | Myc-DDK                                                                     |
| Symbol:                   | Ptch1                                                                       |
| Synonyms:                 | A230106A15Rik; mes; Ptc; Ptc1; Ptch; wig                                    |
| Mammalian Cell Selection: | Neomycin                                                                    |
| Vector:                   | pCMV6-Entry (PS100001)                                                      |
| E. coli Selection:        | Kanamycin (25 ug/mL)                                                        |
| ORF Nucleotide Sequence:  | >MR227010 representing NM_008957<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCTCGGCTGGTAACGCCGCCGGGGCCCTGGGCAGGCAGGCCGGCGGGAGGCGCAGACGGACCG  
GGGGACCCGACCCGCGCCGCGCCGACCGGGACTATCTGCACCGGCCAGCTACTGCGACGCCGCCTTCGC  
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CAGTTAATGACTCCCAAGCAAATGTATGAACACTTCAGGGCTACGACTATGTCTCTCACATCAACTGGA  
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GGCTGCAGGATTGGCCCTGCTCCTTGATTGGCATTCTTTAATGCTGCGACAACCTCAGTTTTGCC



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TTTCTTGCTCTTGGTGTGGTGTGGATGATGTCTTCTCCTGGCCATGCATTAGTGAACAGGACAGA  
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 CCGAGGGGGCCCTGTCCAGGCTATGAGAGTACCCTGAGACTGATCACGGGGTATTTGAGGATCCTCAT  
 GTGCCTTTTTCATGTAGGTGTGAGAGGAGGACTCAAAGGTGGAGGTATAGAGCTACAGGACGTGGAAT  
 GTGAGGAGAGCCGTGGGGGAGCAGCTCCAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR227010 representing NM\_008957  
 Red=Cloning site Green=Tags(s)

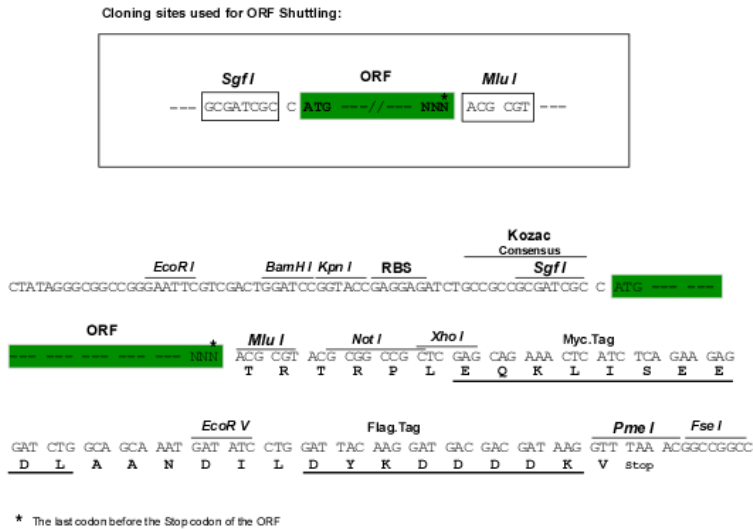
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 FSDSSLHCLEPPCKWTLSSFAEKHYAPFLKPKAKVVVILLFLGLLGVSLYGTTRVRDGLDLTDIVPRE  
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 LQDAFSDSWETGRIMPNNYKNGSDDGVLAYKLLVQTGSRDKPIDISQLTKQRLVDADGIINPSAFYIYLT  
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 RVICNNYTSGLSSYPNGYPFLFWEQYISLRHWLILLSISVVLACTFLVCAVFLNPNWTAGIIVMLALMT  
 VELFGMMGLIGIKLSAVPVVILIASVIGVEFTVHVALAFLTAIGDKNHRAMLALAHMFAPVLDGAVSTL  
 LGVLMAGSEFDIVRYFFAVLAAILTVLGVLNGLVLLPVLLSFFGPCPEVSPANGLNRLPTSPPEPPSV  
 VRFVPPGHTNNGSDSSDSEYSSQTTVSGISEELROYEAQQGAGGPAHQVIVEATENPVFARSTVVHPDS  
 RHQPPLTPRQQPHLDGSLSPGRQGGQPRRPPREGLRPPPYRPRRDAFEISTEGHSGPSNRDRSGPRGA  
 RSHNPRNPTSTAMGSSVPSYCQPIITVTASASVTVAHVPPPGPRNPRGGPCPGYESYPETDHGVFEDPH  
 VPFHVRCERRDSKVEVIELQDVECEERPWGSSSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mm9001\\_c06.zip](https://cdn.origene.com/chromatograms/mm9001_c06.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

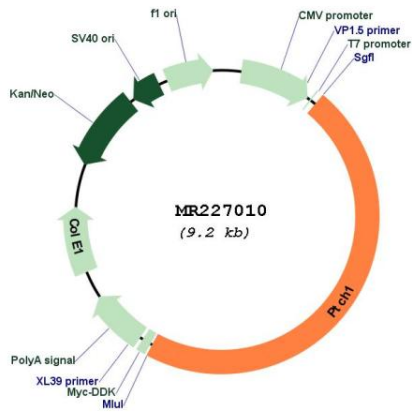


ACCN: NM\_008957

ORF Size: 4302 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>        | 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_008957.3</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>RefSeq Size:</b>           | 4305 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>RefSeq ORF:</b>            | 4305 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Locus ID:</b>              | 19206                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>UniProt ID:</b>            | <a href="#">Q61115</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Cytogenetics:</b>          | 13 32.8 cM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>MW:</b>                    | 159.7 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Gene Summary:</b>          | 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]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

Product images:



Circular map for MR227010