

Product datasheet for RC224642

PTCH2 (NM_003738) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTCH2 (NM_003738) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTCH2
Synonyms:	PTC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224642 representing NM_003738 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACTCGATCGCCGCCCTCAGAGAGCTGCCCCGAGTTACACACCCAGCTCGAACCGCAGCACCCC
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Protein Sequence: >RC224642 representing NM_003738
 Red=Cloning site Green=Tags(s)

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 GGCHGF SHKFMHWQEELLLGGMARDPQGELLRAEALQSTFLLMSRQLYEHFRGDYQTHDIGWSEEQAST
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 GNLSSRGPATG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8008_a08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

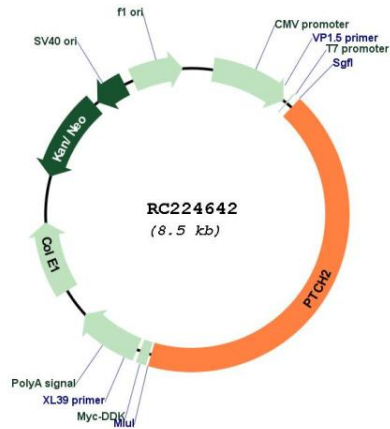


ACCN: NM_003738

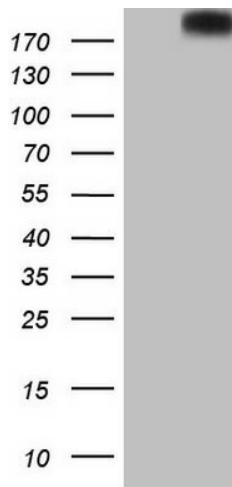
ORF Size: 3609 bp

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:	<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_003738.5
RefSeq Size:	3624 bp
RefSeq ORF:	3612 bp
Locus ID:	8643
UniProt ID:	Q9Y6C5
Cytogenetics:	1p34.1
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Transmembrane
Protein Pathways:	Basal cell carcinoma, Hedgehog signaling pathway, Pathways in cancer
MW:	130.4 kDa
Gene Summary:	This gene encodes a transmembrane receptor of the patched gene family. The encoded protein may function as a tumor suppressor in the hedgehog signaling pathway. Alterations in this gene have been associated with nevoid basal cell carcinoma syndrome, basal cell carcinoma, medulloblastoma, and susceptibility to congenital macrostomia. Alternatively spliced transcript variants have been described.[provided by RefSeq, Oct 2009]

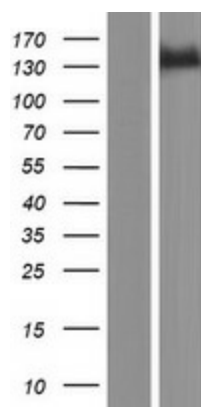
Product images:



Circular map for RC224642



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PTCH2 (Cat# RC224642, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PTCH2 (Cat# [TA804800]). Positive lysates [LY418463] (100ug) and [LC418463] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418463]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224642 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).