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 RC213565

IHH (NM_002181) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IHH (NM_002181) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	IHH
Synonyms:	BDA1; HHG2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC213565 representing NM_002181
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTCCCGCCCGGCTCCGGCCCCGACTGCACTTCTGCCTGGTCCTGTTGCTGCTGCTGGTGGTGCCGG
CGGCATGGGGCTGCGGGCCGGGTCGGGTGGTGGGCAGCCGCCGGCGACCGCCACGCAAACTCGTGCCGCT
CGCCTACAAGCAGTTCAGCCCCAATGTGCCCGAGAAGACCCTGGGCGCCAGCGGACGCTATGAAGGCAAG
ATCGCTCGCAGCTCCGAGCGCTTCAAGGAGCTCACCCCCAATTACAATCCAGACATCATCTTCAAGGACG
AGGAGAACACAGGCGCCGACCGCCTCATGACCCAGCGCTGCAAGGACCGCCTGAACTCGCTGGCTATCTC
GGTGATGAACCAGTGGCCCGGTGTGAAGCTGCGGGTGACCGAGGGCTGGGACGAGGACGGCCACCACTCA
GAGGAGTCCCTGCATTATGAGGGCCGCGCGGTGGACATCACCACATCAGACCGCGACCGCAATAAGTATG
GACTGCTGGCGCGCTTGGCAGTGGAGGCCGGCTTTGACTGGGTGTATTACGAGTCAAAGGCCCACGTGCA
TTGCTCCGTCAAGTCCGAGCACTCGGCCGCAGCCAAGACAGGCGGCTGCTTCCCTGCCGGAGCCCAGGTA
CGCCTGGAGAGTGGGGCGCGTGTGGCCTTGTCAGCCGTGAGGCCGGGAGACCGTGTGCTGGCCATGGGGG
AGGATGGGAGCCCCACCTTCAGCGATGTGCTCATTTTCCTGGACCGCGAGCCTCACAGGCTGAGAGCCTT
CCAGGTCATCGAGACTCAGGACCCCCCACGCCGCCTGGCACTCACACCCGCTCACCTGCTCTTTACGGCT
GACAATCACACGGAGCCGGCAGCCCGCTTCCGGGCCACATTTGCCAGCCACGTGCAGCCTGGCCAGTACG
TGCTGGTGGCTGGGGTGCCAGGCCTGCAGCCTGCCCGCGTGGCAGCTGTCTCTACACACGTGGCCCTCGG
GGCCTACGCCCCGCTCACAAAGCATGGGACACTGGTGGTGGAGGATGTGGTGGCATCCTGCTTCGCGGCC
GTGGCTGACCACCACCTGGCTCAGTTGGCCTTCTGGCCCCTGAGACTCTTTCACAGCTTGGCATGGGGCA
GCTGGACCCCGGGGGAGGGTGTGCATTGGTACCCCCAGCTGCTCTACCGCCTGGGGCGTCTCCTGCTAGA
AGAGGGCAGCTTCCACCCACTGGGCATGTCCGGGGCAGGGAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC213565 representing NM_002181
Red=Cloning site Green=Tags(s)

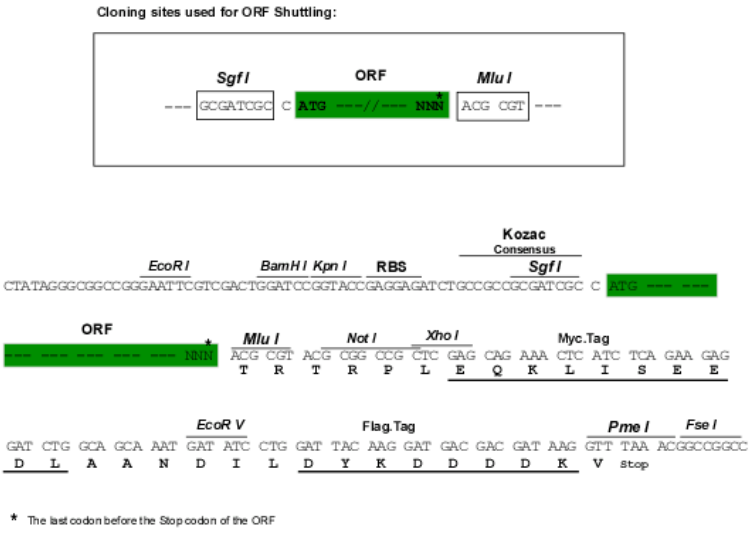
MSPARLRPRLHFCLVLLLLLVVPAAWGCGPGRVVGSRRRPPRKLVPLAYKQFSPNVPEKTLGASGRYEGK
IARSSERFKELTPNYNPDIIFKDEENTGADRLMTQRCKDRLNSLAISVMNQWPGVKLRVTEGWDEDGHHS
EESLHYEGRAVDITTSDRDRNKYGLLARLAVEAGFDWVYYESKAHVHCSVKSEHSAAAKTGGCFPAGAQV
RLESGARVALSAVRPGDRVLAMGEDGSPTFSDVLIFLDREPHRLRAFQVIETQDPPRRLALTPAHLLFTA
DNHTEPAARFRATFASHVQPGQYVLVAGVPGLQPARVAAVSTHVALGAYAPLTKHGTLVVEDVVASCFAA
VADHHLAQLAFWPLRLFHSLAWGSWTPGEGVHWYPQLLYRLGRLLLEEGSFHPLGMSGAGS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3043_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002181

ORF Size: 1233 bp

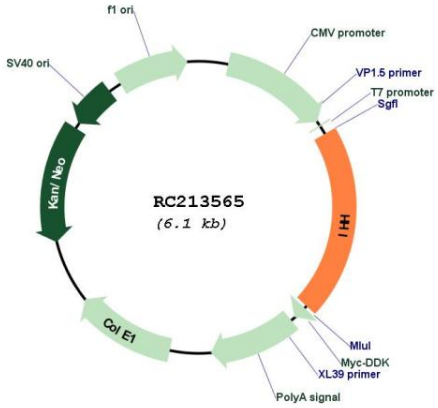
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

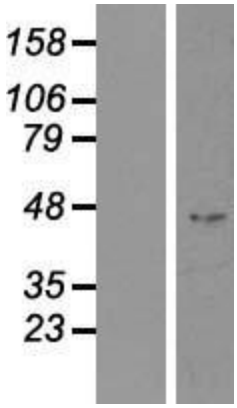
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_002181.4
RefSeq Size:	1236 bp
RefSeq ORF:	1236 bp
Locus ID:	3549
UniProt ID:	Q14623
Cytogenetics:	2q35
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Protease, Transmembrane
Protein Pathways:	Hedgehog signaling pathway
MW:	45.25 kDa
Gene Summary:	This gene encodes a member of the hedgehog family of proteins. The encoded preproprotein is proteolytically processed to generate multiple protein products, including an N-terminal fragment that is involved in signaling. Hedgehog family proteins are essential secreted signaling molecules that regulate a variety of developmental processes including growth, patterning and morphogenesis. The protein encoded by this gene specifically plays a role in bone growth and differentiation. Mutations in this gene are the cause of brachydactyly type A1, which is characterized by shortening or malformation of the fingers and toes. Mutations in this gene are also the cause of acrocapitofemoral dysplasia. [provided by RefSeq, Nov 2015]

Product images:



Circular map for RC213565



Western blot validation of overexpression lysate (Cat# [LY419483]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213565 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).