

Product datasheet for **RG213565**

IHH (NM_002181) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IHH (NM_002181) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	IHH
Synonyms:	BDA1; HHG2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG213565 representing NM_002181 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTCCCGCCCGGCTCCGGCCCCGACTGCACTTCTGCCTGGTCTGTTGCTGCTGCTGGTGGTGCCGG
CGGCATGGGGCTGCGGGCCGGTCCGGTGGTGGGAGCCGCCGGCGACCGCCACGAACTCGTGCCGCT
CGCCTACAAGCAGTTAGCCCAATGTGCCGAGAAGACCCTGGGCGCCAGCGGACGCTATGAAGGCAAG
ATCGCTCGCAGCTCCGAGCGCTCAAGGAGCTCACCCCAATTACAATCCAGACATCATCTTCAAGGACG
AGGAGAACACAGGCGCCGACCGCTCATGACCCAGCGCTGCAAGGACCGCTGAAGTGGTATCTC
GGTATGAACAGTGGCCCGGTGAAGCTGCGGGTGACCGAGGGCTGGGACGAGGACGGCCACCACTCA
GAGGAGTCCCTGCATTATGAGGGCCGCGCGGTGGACATCACACATCAGACCGCGACCGCAATAAGTATG
GACTGCTGGCGCGCTTGGCAGTGGAGGCGCGCTTTGACTGGGTGTATTACGAGTCAAAGGCCACGTGCA
TTGCTCCGTCAAGTCCGAGCACTCGGCCGAGCCAAGACGGGCGGCTGCTTCCCTGCCGGAGCCAGGTA
CGCCTGGAGAGTGGGCGCGTGTGGCCTTGTAGCCGTGAGGCCGGGAGACCGTGTGTTGGCCATGGGG
AGGATGGGAGCCCCACCTCAGCGATGTGCTCATTTTACTGGACCGGAGCCCCACAGGCTGAGAGCCTT
CCAGGTATCGAGACTCAGGACCCCCACGCCCTGGCACTCACACCCGCTCACTTGCTCTTTACGGCT
GACAATCACACGGAGCCGCGAGCCGCTTCCGGGCCACATTTGCCAGCCAGTGCAGCCTGGCCAGTACG
TGCTGGTGGCTGGGCGCCAGGCTGCAGCCTGCCCGCTGGCAGCTGTCTACACACGTGGCCCTCGG
GGCCTACGCCCGCTCACAAAGCATGGGACACTGGTGGTGGAGGATGTGGTGGCATCCTGCTTCGCGGCC
GTGGCTGACCACCACTGGCTCAGTTGGCTTCTGGCCCTGAGACTCTTTCACAGCTTGGCATGGGGCA
GCTGGACCCCGGGGAGGGTGTGCATTGGTACCCCGAGCTGCTTACCGCTGGGGCGTCTCCTGCTAGA
AGAGGGCAGCTTCCACCACTGGGCATGTCCGGGCGAGGAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG213565 representing NM_002181
 Red=Cloning site Green=Tags(s)

MSPARLRPRLHFCLVLLLLLVPAAWGCGPGRVVGSRRRPPRKL VPLAYKQFSPNVPEKTLGASGRYEGK
 IARSSERFKELTPNYNPDIIFKDEENTGADRLMTQRCKDRLNSLAISVMNQWPGVKLRVTEGWEDDGHHS
 EESLHYEGRAVDITTSDDRDNKYGLLARLAVEAGFDWVYVESKAHVHCSVKSEHSAAAKTGGCFPAGA QV
 RLESGARVALSAVRPGDRVLAMGEDGSPTFSDVLILLDREPHRLRAFQVIETQDPPRRLLALTPAHL LFTA
 DNHTEPAARFRATFASHVQPGQYVLVAGAPGLQPARVAAVSTHVALGAYAPLTKHGTLVVEDDVASCF AA
 VADHHLAQLAFWPLRLFHSLAWGSWTPGEGVHWYPQLLYRLGRLLLEEGSFHPLGMSGAGS

TRTRPLE - GFP Tag - V

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.

RefSeq: [NM_002181.1](#), [NP_002172.1](#)

RefSeq Size: 1236 bp

RefSeq ORF: 1236 bp

Locus ID: 3549

UniProt ID: [Q14623](#)

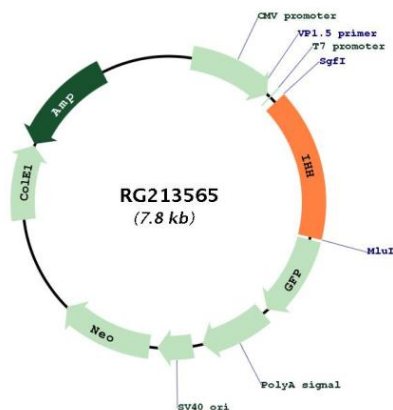
Cytogenetics: 2q35

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Protease, Transmembrane

Protein Pathways: Hedgehog signaling pathway

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 RG213565