

Product datasheet for **MR223892**

Ick (NM_019987) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ick (NM_019987) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ick
Synonyms:	2210420N10Rik; A1848300; Mrk
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR223892 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAATAGATACACAACGATCAAGCAGCTTGGGGATGGGACCTACGGCTCTGTCTGCTGGGGAGAAGCA
 TTGAGTCTGGAGAACTGATTGCCATTAATAAAAAATGAAAAGAAAGTTTTACTCCTGGGAAGAATGCATGAA
 CCTTCGGGAGGTTAAGTCTTTAAAGAAGCTTAATCATGCCAATATCGTAAAGTTAAAAGAGGTTATCAGG
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 ATAAGTTGTTTCCAGAGTCTGCTATAAGGAATATAATGTACCAGATATTGCAAGGACTGGCATTCAATCA
 CAAACACGGTTTCTCCACCGGGACTTAAAACCCGAGAACCTCCTCTGCATGGGACCAGAAGCTTGTGAAA
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 TATCCTTACTTCCAGATCGGACACCCACTGGGCATCATCAGCAAGGACTCAGGAAAACACAGAGAGAGG
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 TACGCTGATTTCTTACGACCAAGCCAAGCCAGTCAAGCCCTCAGCATTCTGTGCACCCCTACAAAGGC
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 CGCTACTTGCCTGGAATAAATAAAGAAATGGCGTCTCCCAAATCCAGGCAAGGACTTTCTTCCATCAA
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 AGTTGGCTCAGGCTCTGCGAGCTCTAGTGGACTGACTGGAAGCTACATCCCTTCTTGTAAAAAGGAA
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 CCGACCTCCAGCTGCTCAGCCTGTGCACGGCAGGATAGACTGGTCTTCCAAGTACCCATCCCGGGCG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>MR223892 protein sequence
 Red=Cloning site Green=Tags(s)

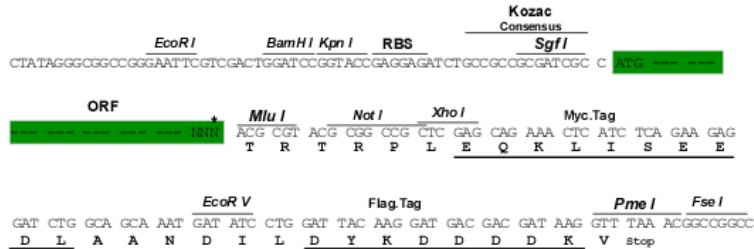
MNRYTTIKQLGDGTYGSVLLGRSIESGELIAIKMKRKFYSWEECMNLREVKSLKLNHANIVKLKEVIR
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 IADFLAREIRSRPPYTDYVSTRWYRAPEVLLRSTNYSSPIDIWAVGCIMAEVYTLRPLFPGASEIDTIF
 KICQVLGTPKKTDPPEGYQLSSAMNFWPQCIPNNLKTLPNASSEAIQLLRDLLQWDPKRPRTASQALR
 YPYFQIGHPLGIISKDSGKQREVQDKTGPPPYIKPAPPAQAPAKAYTLISSRPSQASQPPQHSVHPYKG
 DVSRTQLSHVQEGKPSPPFFPSLHNKLNLPKILASLEQKNGEIKPKSRRRWGLISRSTKGSDDWADLDD
 LDFSPSLTRIDVKNKQRQSDDTLCRFESVLDLKPSESVGTGTTVSTQASSQRRTPTLQSSAKQHYLKH
 RYLPGINIRNGVLPNPGKDFLPSNSWSSSLSGKSSGTVSVVSKITSVGSASSSGLTGSYIPFLKKE
 IGSVMQRVQLAPLAAPPPGYSSLKAVRPHGPRPFHTQPRSTPGLIPRPPAAQPVHGRIDWSSKYPSSR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_019987

ORF Size: 1890 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_019987.1](#), [NM_019987.2](#), [NP_064371.2](#)

RefSeq Size: 6640 bp

RefSeq ORF: 1890 bp

Locus ID: 56542

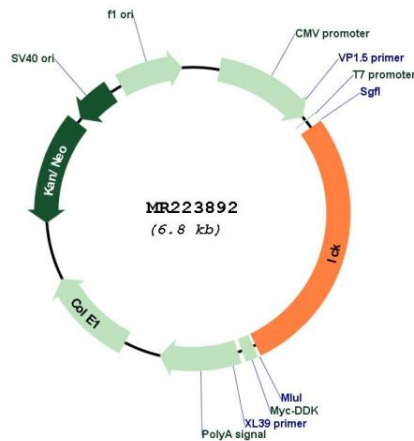
UniProt ID: [Q9JKV2](#)

Cytogenetics: 9 E1

MW: 70.6 kDa

Gene Summary: Has an essential role in ciliogenesis, particularly in neuronal and retinal progenitor cells (PubMed:24797473). Phosphorylates KIF3A (PubMed:24797473). Involved in the control of ciliary length (PubMed:24853502). Regulates the ciliary localization of SHH pathway components as well as the localization of IFT components at ciliary tips (PubMed:24797473, PubMed:24853502). May play a role in cardiac development (By similarity). Regulates intraflagellar transport (IFT) speed and negatively regulates cilium length in a cAMP and mTORC1 signaling -dependent manner and this regulation requires its kinase activity (PubMed:25243405).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR223892