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Product datasheet for MR211627

Ipo5 (NM_023579) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ipo5 (NM_023579) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ipo5
Synonyms:	1110011C18Rik; 5730478E03Rik; AA409333; C76941; IMB3; Kpnb3; Ranbp5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR211627 representing NM_023579
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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TGGTCCGGAAACAGGCGGAGGAAACCTATGAGAATATCCCAGGCCGGTCCAAGATCACATTCCTCTTACA
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TCCTCTGCATTTGATGAAGTCTACCCAGCTCTTCCATCAGATGTCCAGACTGCCATCAAGAGTGAATTGC
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CAGGAATTTAATAGATGAGGACGGCAACAACCAGTGGCCTGAAGGTTTGAAGTTCCTCTTTGATTCAGTC
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TCCATTATGGTGCTCAAGCTCCAGGAGCTGATTCAGAAAGGCACCAAGTTAGTTTTGGAACAAGTTGTGA
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CTCCAGTATGTGTGTGACAACAGCCCAGAAGTCAGGCAAGCTGCGGCATATGGCCTCGGCGTCATGGCGC
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C

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence:

>MR211627 representing NM_023579
Red=Cloning site Green=Tags(s)

MAAAAAEQQQFYLLLGNLLSPDNVVRKQAEETYENIPGRSKITFLLQAIRNTTAAEEARQMAAVLLRRLL
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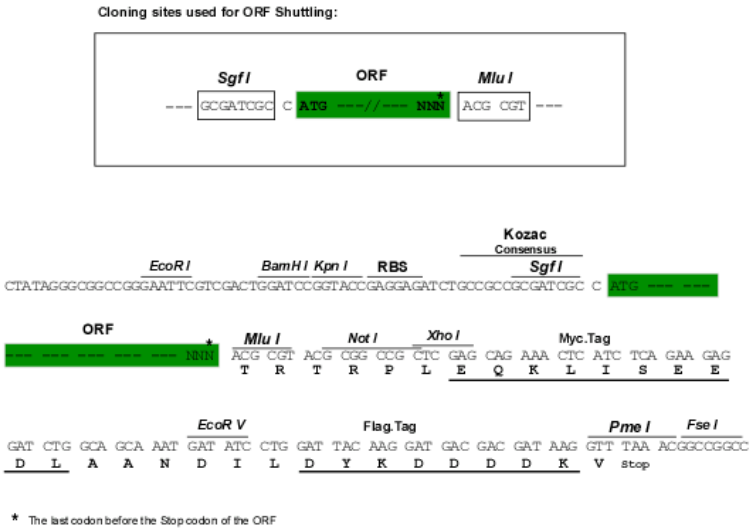
Chromatograms: https://cdn.origene.com/chromatograms/mm9047_f12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_023579

ORF Size: 3291 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_023579.4, NP_076068.1

RefSeq Size: 4598 bp

RefSeq ORF: 3294 bp

Locus ID: 70572

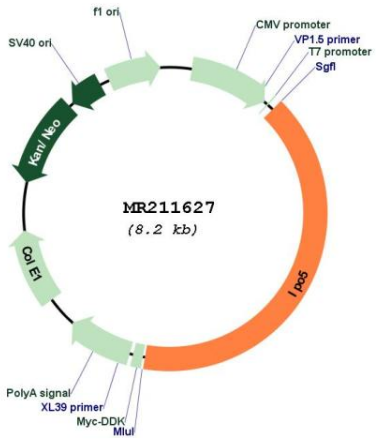
UniProt ID: Q8BKC5

Cytogenetics: 14 E4- E5

MW: 124 kDa

Gene Summary: Functions in nuclear protein import as nuclear transport receptor. Serves as receptor for nuclear localization signals (NLS) in cargo substrates. Is thought to mediate docking of the importin/substrate complex to the nuclear pore complex (NPC) through binding to nucleoporin and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to the importin, the importin/substrate complex dissociates and importin is re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. Mediates the nuclear import of ribosomal proteins RPL23A, RPS7 and RPL5. Binds to a beta-like import receptor binding (BIB) domain of RPL23A. In vitro, mediates nuclear import of H2A, H2B, H3 and H4 histones. Binds to CPEB3 and mediates its nuclear import following neuronal stimulation (PubMed:22730302). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211627