

## Product datasheet for **MC223537**

### Ipo5 (NM\_023579) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ipo5 (NM_023579) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ipo5
Synonyms:	1110011C18Rik; 5730478E03Rik; AA409333; C76941; IMB3; Kpnb3; Ranbp5
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223537 representing NM_023579 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGCGCGCGCCGCGCGGAGCAGCAACAGTTCTACCTGCTCCTGGGAAACCTGCTCAGCCCCGACAATG  
TGGTCCGAAACAGGCGGAGGAAACCTATGAGAATATCCCAGGCCGTCCAAGATCACATTCCTCTTACA  
AGCCATCAGAAACACAACCGCTCCGAGGAGGCTAGACAAATGGCTGCTGTTCTCCTAAGACGTCTTTTG  
TCCTCTGCATTTGATGAAGTCTACCCAGCTCTCCATCAGATGTCCAGACTGCCATCAAGAGTGAATTGC  
TAATGATCATTAGATGGAAACACAATCCAGCATGAGGAAGAAAATCTGTGATATTGCTGCAGAATTGGC  
CAGGAATTTAATAGATGAGGACGGCAACAACAGTGGCCTGAAGGTTTGAAGTTCCTCTTTGATTAGTC  
AGCTCACAAAACATGGGACTCCGGGAAGCTGCCCTTACATATTTTGAAGTTCCTGGAATTTTGGGA  
ACCAACAACAGCACTATTTGGACGTATCAAACGGATGTTAGTTCAGTGTATGCAAGATCAGGAGCATCC  
TTCGATCAGGACACTGTCTGCCAGACTACTGCTGCCTCATACTTGCCAATGAGCATAATGTCGCTCTG  
TTCAAACACTTTGCAGACTTGTGCCTGGATTCTACAGGCTGTCAATGACTCATGTACCAGAATGATG  
ACTCGGTCCTAAAATCCCTTGTGAGATTGCAGACACCGTACCAAAGTACTTGGCCCTCACTTAGAAGC  
AACTCTGCAGTTGAGTCTGAAGTTGTGTGGAGACTAACCTCAATAATATGCAGCGCCAGCTTGCCCTT  
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CGATTCCTCAGATGTTGGCAATGATGGTTGACCTAGAAGAAGTGAGGACTGGGCAAATGCTGATGAGCT  
AGAAGATGATGATTCGATAGCAATGCAGTTGCTGGTGAGAGTGCATTAGACCGAATGGCCTGTGGACTT  
GGTGGAAAGCTCGTTCTGCCATGATTAAGGAACACATTATGCAAATGCTTCAAACCTGATTGGAAT  
ACAGGCATGCAGGACTGATGGCCATCCGCCATTGGCGAAGGATGCCACCAGCAGATGGAAGGAATTCT  
AAATGAGATTGTAATTTTGTCTTCTTTCTCCAGGATCCTCATCCGAGAGTCCGGTATGCAGCCTGC  
AATGCTGTGGGTCAAATGGCTACAGATTTGACCTGGTTTTCAAAGAAATTTTATGAGAAGGTGATTG  
CAGCTTTGCTTACAGCATGGAAGACCAAGGCAACCAGCGGGTGCAGGCCATGCAGCGGCTGCCCTCAT  
TAACCTCACTGAAGATTGCCAAGTCGCTGCTTATCCCTACTTGGATAACTTGGTGAAGCACCTGCAC  
TCCATTATGGTGCTCAAGCTCCAGGAGCTGATTAGAAAGGCCACCAAGTTAGTTTTGAAACAAGTTGTGA



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CATCCATTGCATCAGTTGCAGATACTGCAGAAGAAAAGTTTGTCCCCTACTATGACTTGTATGCCATC  
 ACTGAAGCACATTGTCGAGAACGCAGTCCAGAAGGAGCTGAGACTGCTGCGAGGGAAGACCATCGAGTGC  
 ATCAGCCTCATCGGGCTGGCCGTCGGAAGGAGAAATTCATGCAGGATGCTTCAGATGTGATGCAGCTAT  
 TGTTGAAGACACAGACAGACTTCAATGATATGGAAGATGACGACCCCGAGATTTCTTACATGATCTCAGC  
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 ATGAAGACTGCTTCAATTAAGCCTGAAGTGGCCCTTAGACACCCAGGACATGGAGAATATGAGTGATG  
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 GAACAGGTTGTCAAAGTATGAGTCCCGCTGCTGAAATTTATTTCCACGATGGGGTCCGAGTGGCAGCAG  
 CAGAGTCCATGCCTCTTCTGCTTGTGAGTGTGCGAGAGTCCGGGGTCCGAGTACCTTACACAGATGTGGCA  
 CTTTGTGCGACGCTCTCATCAAGGCCATCGGCACAGAGCCGACTCAGATGTCCTCTCGGAGATCATG  
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 GAGGCATCTGAAGGCGAAGCTGAAGAACATTTCAAAAATCAGGAGTTCGGCAAGTTAAAGACAAGA  
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 TGCTCCATTAATGTCAACCTGATTTGTCCGCAAGACCATGGCCAGACAGACAATGGGGATTGTGCAT  
 CTTTCGATGATATCGTAGAACACTGTAGTCCAGTTCATTTAAGTATGCAGAAATTTTCATAAGTCCAATG  
 CTCAGATATGTGTGACAACAGCCAGAAAGTCAAGGCAAGCTGCGGCATATGGCCTCGGCGTCATGGCGC  
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 TCCAGAGGCTAAGACCAAGAAAATGTCAACGCCACGGAGAATGCATCTCAGCAGTGGGAAAGATCATG  
 AAGTTCAAGCCGACTGTGTGAATGTGGAGGAGTCTTACCACACTGGCTGTCATGGCTGCCCTACACG  
 AAGATAAAGAAGAAGCTGTCCAGACCTTCACTTACCTGTGCGACCTGATTGAAAGTAATCACCCAATTGT  
 TCTTGGCCAAACAATACCAATCTACCGAAAATTCAGTATAATTGCAGAAGGAGAAAATGCATGAGGCC  
 ATTAACATGAAGACCCCTGTGCCAAACGCTGGCCAATGTAGTTCGCCAAGTACAGACTTCTGGAGGAT  
 TGTGGACTGAATGCATAGCTCAACTCAGTCCGGAGCAGCAGGCCATCCAGGACTCCTGAACTCTGC  
 CTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_023579
- Insert Size:** 3294 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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

**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]