

Product datasheet for **MG211627**

Ipo5 (NM_023579) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ipo5 (NM_023579) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ipo5
Synonyms:	1110011C18Rik; 5730478E03Rik; AA409333; C76941; IMB3; Kpnb3; Ranbp5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG211627 representing NM_023579 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCGCGCCGCGCGGAGCAGCAACAGTTCTACCTGCTCCTGGAAACCTGCTCAGCCCCGACAATG
TGGTCCGAAACAGGCGGAGGAAACCTATGAGAATATCCAGGCCGGTCCAAGATCACATTCCTTTACA
AGCCATCAGAAACACAACCGCTGCCGAGGAGGCTAGACAAATGGCTGCTGTTCTCCTAAGACGCTTTTTG
TCCTCTGCATTTGATGAAGTCTACCCAGCTCTCCATCAGATGTCCAGACTGCCATCAAGAGTGAATTGC
TAATGATCATTAGATGGAACACAATCCAGCATGAGGAAGAAAATCTGTGATATTGCTGCAGAATTGGC
CAGGAATTTAATAGATGAGGACGGCAACAACAGTGGCCTGAAGGTTTGAAGTTCCTCTTTGATTACGTC
AGCTCACAAAACATGGGACTCCGGGAAGCTGCCCTTCACATATTTTGAACCTTTCCTGGAATTTTGGGA
ACCAACAACAGCACTATTTGGACGTCATCAAACGGATGTTAGTTCAGTGTATGCAAGATCAGGAGCATCC
TTCGATCAGGACTGTCTGCCAGACTACTGTGCCCTCATACTTGCCAATGAGCATAATGTCGCTCTG
TTCAAACACTTTGCAGACTTGCTGCCTGGATTCTTACAGGCTGTCAATGACTCATGCTACCAGAATGATG
ACTCGTCCTAAAATCCCTTGTGAGATTGCAGACACCGTACCAAAGTACTTGCGCCCTCACTTAGAAGC
AACTCTGCAGTTGAGTCTGAAGTTGTGTGGAGACACTAACCTCAATAATGCAGCGCCAGCTTGCCCTT
GAAGTATTGTGACACTGTGAGACTGCAGCTGCTATGTTAAGAAAGCATACCAGTCTCATCGCACAGA
CGATTCCTCAGATGTTGGCAATGATGGTTGACCTAGAAGAAGATGAGGACTGGGCAAAATGCTGATGAGCT
AGAAGATGATGATTTGATAGCAATGCAGTTGCTGGTGAGAGTGCAATGACCGAATGGCCTGTGGACTT
GGTGGAAAGCTCGTTCTGCCATGATTAAGGAACACATTATGCAAATGCTTCAAACCTGATTGGAAAT
ACAGGCATGCAGGACTGATGGCCCTATCCGCCATTGGCGAAGGATGCCACCAGCAGATGGAAGGAATTCT
AAATGAGATTGTAATTTTGTCTTTTCTCCAGGATCCTCATCCGAGAGTCCGGTATGCAGCCTGC
AATGCTGTGGTCAAATGGCTACAGATTTTGCACCTGGTTTTCAAAGAAATTTTCATGAGAAGGTGATTG
CAGCTTTGCTTACAGACATGGAAGCAAGGCAACCAGCGGTGCAGGCCATGCAGCGGCTGCCCTCAT
TAACTTCACTGAAGATTGCCAAGTCGCTGCTTATTCCCTACTTGATAACTTGGTGAAGCACCTGCAC



[View online »](#)

TCCATTATGGTGCTCAAGCTCCAGGAGCTGATTAGAAAGGCACCAAGTTAGTTTTGGAACAAGTTGTGA
 CATCCATTGCATCAGTTGCAGATACTGCAGAAGAAAAGTTTGTCCCCTACTATGACTTGTATGCCATC
 ACTGAAGCACATTGTGCGAGAACGCAGTCCAGAAGGAGCTGAGACTGCTGCGAGGGAAGACCATCGAGTGC
 ATCAGCCTCATCGGGCTGGCCGTGCGGAAGGAGAAATTCATGCAGGATGCTTCAGATGTGATGCAGCTAT
 TGTTGAAGACACAGACAGACTTCAATGATATGGAAGATGACGACCCCAAGATTCTTACATGATCTCAGC
 ATGGGCCAGGATGTGCAAAATCCTTGGGAAAGAATTCAGCAGTACCTCCCGTGTTATGGGGCCGCTG
 ATGAAGACTGCTCAATTAAGCCTGAAGTGGCCCTTCTAGACACCCAGGACATGGAGAATATGATGATG
 ATGACGGTTGGGAATTTGTGAACCTCGGAGATCAGCAAAGTTTTGGTATTAACACTGCAGGACTGGAAGA
 AAAGTCAACGGCTTGTCAGATGTTGTTTTGCTATGCTAAGGAATTAAGGAAGTTTTGTGAATACACT
 GAACAGGTTGTCAAAGTATGTTCCCGCTGCTGAAATTTATTTCCACGATGGGGTCCGAGTGGCAGCAG
 CAGAGTCCATGCCTCTTCTGCTTGTGAGTGTGCGAGAGTCCGGGGTCCGAGTACCTTACACAGATGTGGCA
 CTTTATGTGCGACGCTCTCATCAAGGCCATCGGCACAGAGCCGACTCAGATGTCCTCTCGGAGATCATG
 CATTCTTTGCAAAGTGCATTGAGGTGATGGGAGACGGGTGCCTCAACAATGAGCACTTTGAGGAGCTGG
 GAGGCATCCTGAAGGCGAAGCTTGAAGAACATTTCAAAAATCAGGAGTTCGGCAAGTTAAAGACAAGA
 TGAAGACTATGACGAGCAGGTTGAAGAGTCACTACAAGATGAGGATGATAATGATGTTTATATACTGACT
 AAAGTGTCCGATATTTTACACTCAATATTCAGTAGCTACAAAGAAAAGGTTTCCCGTGGTTTGAACAGC
 TGCTCCCATTAATTGTCAACCTGATTTGTCCGCAAGACCATGGCCAGACAGACAATGGGGATTGTGCAT
 CTTTCGATGATATCGTAGAACACTGTAGTCCAGCTTCATTTAAGTATGCAGAAATTTTATAAGTCCAATG
 CTCCAGTATGTGTGTGACAACAGCCAGAAAGTCAAGGCAAGCTGCGGCATATGGCCTCGGCGTATGGCGC
 AGTTTGGTGGAGATAACTACCGCCTTTCTGTACCGATGCACTCCCGTCTGTTAAGAGTCACTCAGGC
 TCCAGAGGCTAAGACCAAGAAAATGTCAACGCCACGGAGAATGCATCTCAGCAGTGGGAAAGATCATG
 AAGTTCAAGCCCGACTGTGTGAATGTGGAGGAGTCTTACCACACTGGCTGTGATGGCTGCCCTACAGC
 AAGATAAAGAAGAAGCTGTCCAGACCTTCACTTACCTGTGCGACCTGATTGAAAGTAAATACCCCAATTGT
 TCTTGGCCCAAAACAATACCAATCTACCGAAAATATTTCAGTATAATTGCAGAAGGAGAATGCATGAGGCC
 ATTAACATGAAGACCCCTGTGCCAAACGCTGGCCAATGTAGTTCGCCAAGTACAGACTTCTGGAGGAT
 TGTGGACTGAATGCATAGCTCAACTCAGTCCGGAGCAGCAGGCCATCCAGGAGCTCCTGAACTCTGC
 C

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG211627 representing NM_023579
 Red=Cloning site Green=Tags(s)

MAAAAAEQQFYLLGNLLSPDNVVRKQAEETYENIPGRSKITFLLQAIRNTTAAEEARQMAAVLLRRL
 SSAFDEVYPALPSDVQTAIKSELLMIQMETQSSMRKKICDIAELARNLIDEDGNNQWPEGLKFLFDSV
 SSQNMGLREAALHIFWNFPGIFGNQQHYLDVIKRMVLVQCMQDQEHPISIRTL SARATAAFILANEHNVAL
 FKHFADLLPGFLQAVNDSYQNDQSVLKSVEIADTVPKYLRPHLEATLQLSLKLCGDTNLMNMQRLAL
 EVIVTLSETAAAMLKHTSLIAQTIPOMLAMVDLEEDWDANADELEDDDFDSNAVAGESALDRMACGL
 GGKLVLPIMKEHIMQMLQNPDKYRHAAGLMAISIGEGCHQQMEGILNEIVNFVLLFLQDPHPRVRYAAC
 NAVQMATDFAPGFQKFFHEKVIAALLQTMEDQGNQRVQAAAAALINFTEDCPKSLLIPYLDNLVKHLH
 SIMVLKQLQELIQKGTKL VLEQVVTSIASVADTAEEKFVPPYDLFMPSLKHIVENAVQKELRLLRGKTIEC
 ISLIGLAVGKEKFMQDASDVMQLLLKTQDFNDMEDDDPQISYMI SAWARMCKILGKEFQYQLPVVMGPL
 MKTASIKPEVALLDQDMENMSDDDGWVFNLDGQQSFGIKTAGLEEKSTACQMLVCYAKELKEGFVEYT
 EQVVKLMVPLLKFYFHDGVRVAAAESMPLLECARVRGPEYLTQMWHFMDALIKAIIGTEPDSVLSEIM
 HSFAKCIEVMGDGCLNNEHFEELGGILKAKLEEHFKNQELRQVKRQDEYDEQVEESLQDEDDNDVYILT
 KVSIDLHSIFSSYKEKVLWFEQLLPLIVNLICPQRPWDRQWGLCIFDDIVEHCSPASFKYAEYFISPM
 LQYVCDNSPEVRQAAAYGLGVMAQFGGDNYRPFCTDALPLLVRVIQAPEAKTKENVNATENCISAVGKIM
 KFKPDCNVVEEVLPHWLSWLP LHEDKEEAVQTF SYLCDLIESNHPIVLPNNTNLPKIFSI AEGEMHEA
 IKHEDPCAKRLANVVRQVQTSGLWTECIAQLSPEQAAIQELLNSA

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

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:	<ol style="list-style-type: none">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:	<u>NM_023579.4</u> , <u>NP_076068.1</u>
RefSeq Size:	4598 bp
RefSeq ORF:	3294 bp
Locus ID:	70572
UniProt ID:	<u>Q8BKC5</u>
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]