

Product datasheet for **MG225052**

Xpo5 (NM_028198) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Xpo5 (NM_028198) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Xpo5
Synonyms:	2410004H11Rik; 2700038C24Rik; A1648907; AW549301; Exp5; mKIAA1291; RanBp21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG225052 representing NM_028198 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGATGGAGCAAGTGAACGCGCTGTGCGAGGAGCTAGTGAAGCGGTGACGGTCATGATGGACCCCA
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CTGGACAGTGAGGAGGGTGGACTGGCCACCATCTTTGAACCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG225052 representing NM_028198
 Red=Cloning site Green=Tags(s)

MEMEQVNALCEELVKAVTVMMDPSSTQRYRLEALKFCEEFKEKCPICPCGLKLAEKTQIAIVRHFG LQI
 LEHVVKFRWNSMSRLEKVVYKNSVMELIANGTLRILEEENHIKDVLSRIVVEMIKREWQHWPDM LMELD
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 SSQEAQANCRVSAALNNTLAGYIDWVSLNHITAENCKLVETLCLLLNEQELQLGAAECLLIASVRK GK
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 PSCESYRFDFFSDEDFNAFFNSRAQHGEVVRVCRLDPKTSFQMAAEWLKYQLSASIDTGPVNSCSTAGT GEG
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 LCWPLLKQVMSGTLLADAVTWLFTSVLKGLQMHGQHDGCMASLVHLAFQIYEALRPRYLEIRAVMEQIPE
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TRTRPLE - GFP Tag - V

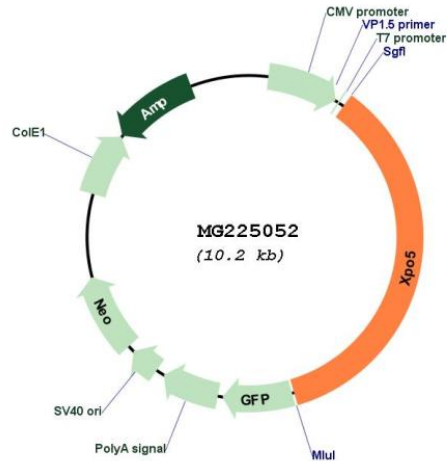
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_028198

ORF Size: 3612 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_028198.2](#), [NP_082474.1](#)

RefSeq Size: 3709 bp

RefSeq ORF: 3615 bp

Locus ID: 72322

UniProt ID: [Q924C1](#)

Cytogenetics: 17 C

Gene Summary:

Mediates the nuclear export of proteins bearing a double-stranded RNA binding domain (dsRBD) and double-stranded RNAs (cargos). XPO5 in the nucleus binds cooperatively to the RNA and to the GTPase Ran in its active GTP-bound form. Proteins containing dsRBDs can associate with this trimeric complex through the RNA. Docking of this complex to the nuclear pore complex (NPC) is mediated through binding to nucleoporins. Upon transit of a nuclear export complex into the cytoplasm, hydrolysis of Ran-GTP to Ran-GDP (induced by RANBP1 and RANGAP1, respectively) cause disassembly of the complex and release of the cargo from the export receptor. XPO5 then returns to the nuclear compartment by diffusion through the nuclear pore complex, to mediate another round of transport. The directionality of nuclear export is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. Overexpression may in some circumstances enhance RNA-mediated gene silencing (RNAi) (By similarity). Mediates nuclear export of ADAR/ADAR1 in a RanGTP-dependent manner (By similarity).[UniProtKB/Swiss-Prot Function]