OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC223945

Xpo5 (NM_028198) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Xpo5 (NM_028198) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Xpo5
Synonyms:	2410004H11Rik; 2700038C24Rik; AI648907; AW549301; Exp5; mKIAA1291; RanBp21
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

Fully Sequenced ORF:

>MC223945 representing NM_028198
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGATGGAGCAAGTGAACGCGCTGTGCGAGGAGCTAGTGAAAGCGGTGACGGTCATGATGGACCCCA
GCTCTACCCAGCGCTACCGGCTGGAAGCCCTCAAGTTTTGTGAAGAGTTTAAAGAAAAATGCCCTATCTG
TGTTCCATGTGGCTTGAAGTTGGCTGAAAAAACACAAATTGCCATCGTCAGACATTTTGGCCTTCAGATC
CTGGAGCATGTTGTCAAGTTTCGATGGAACAGCATGTCCCGATTGGAGAAGGTCTATCTGAAGAACAGTG
TCATGGAGCTGATCGCAAATGGAACACTGAGGATTTTGGAGGAGGAGAACCACATTAAAGATGTTCTGTC
TAGAATTGTGGTAGAGATGATCAAACGAGAGTGGCCACAGCACTGGCCTGACATGCTCATGGAGTTGGAT
ACTCTCTTCAGGCAAGGGGAAACGCAGAGGGAGTTGGTGATGTTCATCCTTCTCCGACTGGCCGAGGATG
TAGTGACCTTTCAGACGCTCCCCACTCAAAGAAGAAGGGATATTCAGCAAACATTGACGCAGAACATGGA
AAGAATCTTGAATTTTCTACTCAATACGCTTCAGGAAAATGTAAACAAGTACCAACAAATGAAGACAGAT
TCATCTCAGGAGGCAGAGGCTCAAGCCAACTGTCGAGTAAGCGTGGCGGCCCTGAACACTCTAGCCGGCT
ACATTGACTGGGTATCTTTGAACCATATCACTGCCGAGAACTGTAAACTCGTGGAGACTCTGTGCCTGCT
TCTCAATGAGCAGGAGCTGCAGTTGGGAGCCGCCGAGTGTCTGCTCATTGCAGTCAGCAGAAAAGGCAAG
CTGGAGGACCGGAAGCGCTTGATGATCCTGTTTGGAGATGTCGCCATGCATTATATTCTCTCGGCCGCAC
AGACTGCAGATGGAGGAGGCTTGGTCGAAAAACACTACCTCTTCCTGAAGAGACTTTGTCAGGTGTTATG
TGCACTGGGAAATCTGCTATGTGCACTGCTGGCCTTAGATGCTAACATACAAACACCTATAAACTTTGGA
ATGTACCTGGAATCTTTTCTTGCTTTCACAACCCATCCAAGTCAGTTTTTACGCTCTTCAACCCATATGA
CGTGGGGAGCCCTCTTCAGGCATGAAGTTCTGTCCCGTGATCCGGCACTGTTAGCAGTAATACCAAAATA
TCTTCGTGCTTCTATGACAAACTTGGTCAAGATGGGCTTTCCTTCTAAAACAGATAGCCCCAGCTGTGAA
TATTCCCGATTTGATTTCGATAGTGATGAGGACTTCAATGCTTTCTTCAACTCCTCCCGAGCCCAGCATG
GAGAGGTGGTGAGGTGTGTGTGTCGACTGGATCCTAAGACTAGCTTCCAGATGGCGGCAGAATGGCTCAA
GTATCAGCTGTCAGCTTCTATTGACACTGGACCTGTGAACTCATGTTCTACAGCTGGAACTGGAGAGGGA
GGCTTCTGCTCCATCTTCTCACCTTCATATGTGCAGTGGGAAGCTATGACTTTTTTTTTGGAAAGTGTGA

View online »

TCAACCAGATGTTTCGAACACTAGACAAAGAAGAGCTCCCGGTTAGTGATGGGATAGAGCTGCTGCAGCT
GGTGTTGAACTTTGAAATCAAGGATCCCCTCGTCCTGTCCTGCGTCCTCACTAATGTCTCAGCGCTCTTC
CCATTTGTCACATACAAGCCTGCGTTCTTGCCCCAGGTCTTCTCTAAGCTCTTTTCATTTGTTACTTTTG
AATCTGTTGGGGAAAGTAAGGCCCCCAGGACTCGGGCAGTCAGGAATGTAAGGAGACATGCTTGTTCCTC
CATCAACAAGATGTGTCGGGACTACCCAGACCTTGTTCTGCCCAATTTTGACATGCTTTATAGCCACGTG
AAGCAACTCCTCTCCAATGAGCTCCTCCTGACCCAGATGGAGAAGTGCGCCCTCATGGAAGCTCTGGTTC
TCGTTAGCAACCAATTCAAGGATTATGAGCGGCAGAAGTTATTCCTAGAGGAGCTGATGGCACCGGTGGT
CAACATCTGGCTTTCTGAAGAAATGTGCAGAGCGCTGTCAGATATTGACTCCTTCATTGCCTATGTGGGT
GCTGATCTGAAAAGCTGTGACCCAGCTGTGGAGGATCCATGTGGCTTGAACCGTGCACGAATGAGCTTTT
GTGTGTACAGCATCCTGGGGGTTATGAGACGCACTAGCTGGCCTTCCGACCTAGAAGAAGCCAAAGCTGG
GGGCTTTGTGGTGGGCTACACACCCAGTGGAAATCCCATCTTCCGTAACCCCTGCACAGAGCAGATCCTC
AGACTTCTCGACAATTTGCTTGCCCTTGTAAGAACTCACAATACTTTATATACACCGGAAATGCTAACGA
AAATGGCAGAACCTTTCACCAAGGCTCTGGATATAGTTGAATCTGAAAAAACGGCAATATTAGGATTACC
TCAGCCTCTCTTGGAATTCAACGACCACCCTGTCTATAGAACCACTCTGGAGAGGATGCAGCGGTTCTTT
GGCATTCTCTATGAAAACTGTTACCATATCCTAGGGAAGGCAGGCCCTTCCATGCAGCAAGATTTCTACA
CTGTGGAGGACCTTGCTTCCCAGCTCCTTGGATCAGCTTTCGTCAACTTGAACAATATTCCTGACTTCCG
GCTTAGATCTATGCTTCGTGTCTTCGTGAAGCCCCTCGTGCTCTTCTGCCCCTCAGAACACTATGAAACC
CTGATATCTCCCATCCTTGGACCTCTCTTCACCTACCTCCACATGAGGCTCTCTCAGAAGTGGCATGTCA
TCAACCAGAGGAGCATCCTGTGTGGAGAAGATGAGATTGCAGAGGACAACCCCGAGTCTCAGGAAATGCT
CGAGGAACAGCTGGTGAGGATGCTCACCCGAGAAGCCATGGACCTAATCATGGCTTGCTGTGTGTCGAAG
AAGACTGCCGACCACACAGCCGCTCCCACTGCAGATGGAGATGATGAAGAGATGATGGCCACTGAAGTAG
CCCCCTCGTCTGTGGTGGAGCTCACAGACCTGGGCAAATGCCTCATGAAGCACGAGGATGTCTGCACAGC
ACTGCTAATCACAGCATTTAATTCTCTGACCTGGAAGGACACACTGTCTTGCCAGAGGGCTACCACACAG
CTCTGCTGGCCCCTCCTCAAACAGGTGATGTCTGGGACCCTGCTCGCAGACGCTGTCACTTGGCTTTTCA
CCAGTGTGCTGAAAGGACTGCAGATGCACGGGCAGCACGATGGGTGCATGGCTTCCCTGGTCCACTTGGC
CTTCCAGATATACGAGGCGCTGCGCCCCAGGTACCTAGAGATAAGAGCAGTAATGGAGCAGATCCCTGAA
ATAAACAAGGAGTCTCTGGACCAATTTGACTGCAAGCTTTTAAACCCCTCCCTTCAAAAAGCAGCTGATA
AACGACGGAAGGACCACTTCAAACGTCTAATCGCTGGCTGCATTGGGAAACCCTTGGGAGAACAGTTCCG
AAAAGAAGTTCACATTAAGAACCTTCCCTGGCTTTTCAAAAAACCCAAACCAATGTTGGAGACAGAAGTG
CTGGACAGTGAGGAGGGTGGACTGGCCACCATCTTTGAACCCTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_028198

Insert Size: 3615 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_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]