

## Product datasheet for MR225052L4V

## 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

## **Xpo5 (NM\_028198) Mouse Tagged ORF Clone Lentiviral Particle**

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** Xpo5 (NM\_028198) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Xpo5

**Synonyms:** 2410004H11Rik; 2700038C24Rik; Al648907; AW549301; Exp5; mKIAA1291; RanBp21

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_028198 **ORF Size:** 3612 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR225052).

OTI Disclaimer:

Sequence:

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.

**RefSeg:** NM 028198.2

 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]