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Product datasheet for MG201342

Pin1 (NM_023371) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pin1 (NM_023371) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pin1
Synonyms:	0610025L01Rik; D9Bwg1161e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG201342 representing NM_023371
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGACGAGGAGAAGCTGCCACCAGGCTGGGAGAAGCGTATGAGTCGCAGCTCAGGCCGGGTGTACT
ACTTCAATCACATCACCAACGCCAGCCAGTGGGAGCGGCCCAGCGGCGGCAGCACTGTTGGAGGCAGCAG
CAAGAATGGCCAGGGTGAGCCTGCCAAGGTGCGCTGCTCACATCTGCTGGTGAAGCACAGCCAGTCTCGG
AGGCCCTCATCCTGGCGGCAGGAAAAGATCACCAGGAGCAAGGAGGAGGCCCTGGAGCTCATCAATGGCT
ATATCCAGAAGATTAAGTCAGGAGAGGAAGACTTTGAATCTCTGGCCTCACAGTTCAGTGATTGCAGCTC
TGCCAAAGCCAGGGGAGACCTGGGTCCCTTCAGCAGAGGTCAGATGCAGAAACCATTTGAGGATGCGTCG
TTTGCTCTACGGACAGGGGAGATGAGTGGGCCCGTGTTCACGGACTCGGGCATCCATATCATCCTGCGCA
CAGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG201342 representing NM_023371
Red=Cloning site Green=Tags(s)

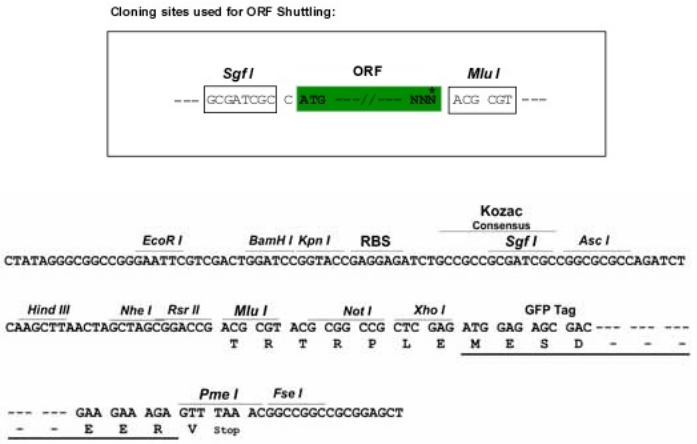
MADEEKLPPGWEKRMSRSSGRVYYFNHITNASQWERPSGGSTVGGSSKNGQGEPAKVRCSHLLVKHSQSR
RPSSWRQEKITRSKEEALELINGYIQKIKSGEEDFESLASQFSDCSSAKARGDLGPFSRGQMQKPFEDAS
FALRTGEMSGPVFTDSGIHIILRTE

TRTRPLE - GFP Tag - V

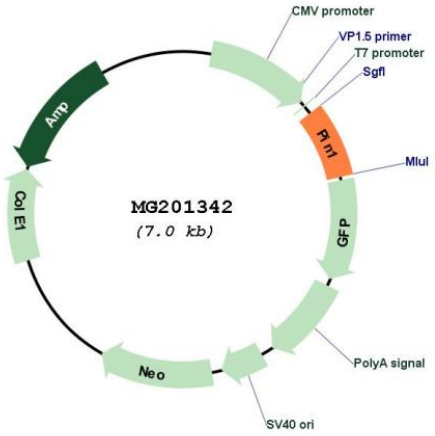
Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



Plasmid Map:



ACCN:	NM_023371
ORF Size:	495 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_023371.4
RefSeq Size:	3810 bp
RefSeq ORF:	498 bp
Locus ID:	23988
UniProt ID:	Q9QUR7
Cytogenetics:	9 7.6 cM
Gene Summary:	Peptidyl-prolyl cis/trans isomerase (PPIase) that binds to and isomerizes specific phosphorylated Ser/Thr-Pro (pSer/Thr-Pro) motifs. By inducing conformational changes in a subset of phosphorylated proteins, acts as a molecular switch in multiple cellular processes. Displays a preference for an acidic residue N-terminal to the isomerized proline bond. Regulates mitosis presumably by interacting with NIMA and attenuating its mitosis-promoting activity. Down-regulates kinase activity of BTK. Can transactivate multiple oncogenes and induce centrosome amplification, chromosome instability and cell transformation. Required for the efficient dephosphorylation and recycling of RAF1 after mitogen activation (By similarity). Binds and targets PML and BCL6 for degradation in a phosphorylation-dependent manner (PubMed:17828269). Acts as a regulator of JNK cascade by binding to phosphorylated FBXW7, disrupting FBXW7 dimerization and promoting FBXW7 autoubiquitination and degradation: degradation of FBXW7 leads to subsequent stabilization of JUN (By similarity). May facilitate the ubiquitination and proteasomal degradation of RBBP8/CtIP through CUL3/KLHL15 E3 ubiquitin-protein ligase complex, hence favors DNA double-strand repair through error-prone non-homologous end joining (NHEJ) over error-free, RBBP8-mediated homologous recombination (HR) (By similarity).[UniProtKB/Swiss-Prot Function]