

Product datasheet for **MG216063**

Sh3pxd2a (NM_001164717) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Sh3pxd2a (NM_001164717) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Sh3pxd2a
Synonyms:	2310014D11Rik; AA589508; AI256723; AI413738; C230050L11; EG329070; Fish; Gm5098; Sh3md1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG216063 representing NM_001164717
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTCGCTACTGCGTGAAGATGCCACCGTGGTGGACGTGGAGAAGCGGAGGAGCCCTCTAACACT
 ATGTATACATTATCAACGTGACCTGGTCTGACTCCACCTCCAGACTATCTACCGAGGTACAGCAAGTT
 CTTGACCTGCAGATGCAGCTTCTGGATAAGTTTCTATTGAAGGTGGCCAGAAGGATCCGAAGCAAAGG
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 TAAAGCCCATCGATGAATACTGCAGGGCGCTTGTCCGGCTGCCGCCCACATTTACAGTGTGACGAAGT
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 AGCCCATGATCCTGGAACAGTACGTGGTGGTGTCCAATAAAGAAACAAGAGAAGTCCGAGCTGAGCCT
 CCAGGCCGGGAGGTGGTAGATGTCATCGAGAAGAACGAAAGCGGCTGGTGGTTTGTGAGCAGATCTGAA
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 TCCCCGTGTGTCCCAAAAAGGAATGGGAAGGGCAAGGCGCCACCTACG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG216063 representing NM_001164717
Red=Cloning site Green=Tags(s)

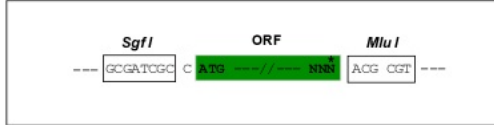
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PKVGTKKDPDKAGLASCARAKPSVRPKPVLNRAESQSQEKMDISSLRQLRPTGQLRGASRALGVRTQS
CLHRWLLRDPGEVLR TSSLRPPLPRVSPKRNGKGKAPPT

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoRI
BamHI KpnI
RBS
Kozac
Consensus
SgfI
AscI

CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

HindIII
NheI RsrII
MluI
NotI
XhoI
GFP Tag

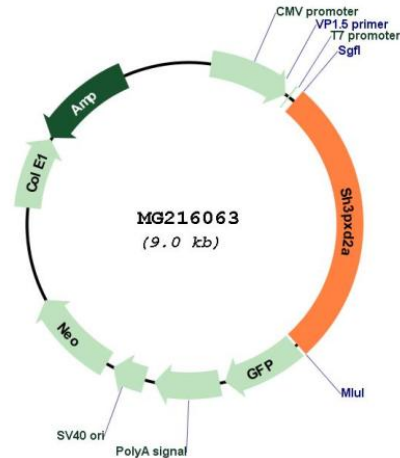
CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- --- ---

T R T R P L E
M E S D
- - -

PmeI
FseI

--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT

- - - E E R V Stop

Plasmid Map:


ACCN: NM_001164717

ORF Size: 3288 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_001164717.1](#), [NP_001158189.1](#)

RefSeq Size: 10380 bp

RefSeq ORF: 3291 bp

Locus ID: 14218

UniProt ID: [O89032](#)

Cytogenetics: 19 C3

Gene Summary:

Adapter protein involved in invadopodia and podosome formation, extracellular matrix degradation and invasiveness of some cancer cells. Binds matrix metalloproteinases (ADAMs), NADPH oxidases (NOXs) and phosphoinositides. Acts as an organizer protein that allows NOX1- or NOX3-dependent reactive oxygen species (ROS) generation and ROS localization. In association with ADAM12, mediates the neurotoxic effect of amyloid-beta peptide (By similarity).[UniProtKB/Swiss-Prot Function]