

## Product datasheet for **MC223542**

### Sh3pxd2a (NM\_001164717) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sh3pxd2a (NM_001164717) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Sh3pxd2a
Synonyms:	2310014D11Rik; AA589508; AI256723; AI413738; C230050L11; EG329070; Fish; Gm5098; Sh3md1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
Fully Sequenced ORF:	>MC223542 representing NM_001164717 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTCGCTACTGCGTGCAAGATGCCACCGTGGTGGACGTGGAGAAGCGGAGGAGCCCTCTAAACACT  
ATGTATACATTATCAACGTGACCTGGTCTGACTCCACCTCCAGACTATCTACCGAGGTACAGCAAGTT  
CTTCGACCTGCAGATGCAGCTTCTGGATAAGTTTCTATTGAAGGTGGCCAGAAGGATCCGAAGCAAAGG  
ATTATTCCTTTCTCCAGGCAAGATCCTTCCGGAGAAGCCACATCCGCGACGTGGCTGTGAAGAGAC  
TAAAGCCATCGATGAATACTGCAGGGCGCTTGTCCGGCTGCCGCCACATTTACAGTGTGACGAAGT  
CTTCCGGTTCTTTGAGGCACGGCCTGAGGATGTCAACCTCCAAAAGAAGACTATGGCAGTTCCAAGAGG  
AAATCAGTGTGGTTGTCCAGCTGGGCTGAGTCTCCAAGAAGGACGTGACAGGTGCCGACCAACGCCG  
AGCCCATGATCCTGGAACAGTACGTGGTGGTGTCCAATAAAGAAACAAGAACTCGGAGCTGAGCCT  
CCAGGCCGGGGAGGTGGTAGATGTCATCGAGAAGAACGAAAGCGGCTGGTGGTTTGTGAGCACATCTGAA  
GAGCAAGGTTGGGTCCCCGCCACCTACTGGAGGCCAGAATGGCACACGAGACGACTCGGACATCAACA  
CCTCAAGACTGGGAAGAAGAGAAGTATGTCAGTGTGCAGCCCTACACCAGCCAGAGCAAAGACGAGAT  
CGGCTTCGAGAAGGGTGTACCGTGGAGGTGATTCGAAAGAACCTGGAAGGCTGGTGGTACATCAGGTAC  
CTCGGCAAAGAGGTTGGCCACCAAGCCTACCTGAAGAAGGCCAAGGATGACCTGCCGACCCGGAAGA  
AGAACCTGGCGGGTCCGGTGGAGATCATAGGGAACATTATGGAGATCAGCAACCTTCTCAACAAGAAGGC  
ATCTGGGGATAAAGAGGCTCCGGCTGAAGGCGAGGGATCCGAGGCCCCATCACCAGAAGAGATCAGC  
TTACCGATCCTCTGCAACGCCTCCAATGGCAGCGCCTTGCCATTCCCGAGAGGACCACATCCAAGCTAG  
CCCAGGGCTCCCCAGCTGTGGCCAGGATCGCCCTCAGAGGGCCAGATCAGCTCCCCAAATCTGAGGAC  
AAGACCTCCCCGCGCAGAGAATCCAGCCTGGGGTTCCAGCTGCCAAAGCCGCCAGAGCCCCCTTCTGTT  
GAGGTAGAATACTACACCATTGCTGAATCCAGTCTGCATTTCTGACGGGATCAGCTTTCGAGGCGGAC  
AGAAGGCAGAGGTCATCGACAAGAACTCGGGTGGTTGGTGGTACGTGCAGATCGGGGAGAAGGAGGGCTG  
GGCCCCAGCCTCATACTTGACAAGCGCAAGAAACCAACCTCAGCCGCCAACCAGCACTCTGACGCG



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CCCAAGGTGCGCCACCTGCGCCCCCAGCAAGCCTAAGGAGGCCGAGGAGAATCTGTGGGTGCCTGTG
AGAGCCAGGGCTCCCCTGAAGGTTAAATACGAGGAACCCGAGTATGACGTCCCTGCCTTTGGCTTTGA
CTCAGAGCCCAGATGAATGAAGAGCCTTCAGGGGACAGAGGTTTCAGGTGACAAGCATCCCGCCAGCCC
CGAAGGATCTCGCCTGCCTCTTCCCTGCAACGGGCCATTTCAAGGTGGGTGAGTCTTCTGAGGACGTGG
CCCTGGAAGAGGAGACCATCTATGAGAAATGAGGGCTTCAGGCCATACACAGAAGACACCCCTGTCTGCCAG
AGGCTCCTCTGGGACAGTGACTCCCCTGGGAGCTCCTTTGTCCCTTGCCGTAAAAAATCCCCTAAA
TCAGATCCCCCAATCCTCATCACTCCTAAAGCTCAAAGCAGAGAAGAATGCCAGGCAGAACTGGGGA
AAAACCATGCAACATCTCCTTCTCCTCTGTCAACATCAGCACCCCTGTTCCCTCCTCCTCATCCTC
GTCCTCCTGTCCAAGAACAATGGTGACCTGAAACCACGTTCTGCCTCAGATGCAGGTATCCGTGACACC
CCTAAGGTTGGGACCAAGAAAGATCCTGATGTGAAGGCCGGGCTGGCCTCCTGCGCCGAGCCAAGCCAT
CCGTGAGACCAAGCCAGTCTGAACCGAGCGGAGTCTCAAAGCCAGGAGAAGATGGATATTAGTTCCTT
ACGGGCCAGCTGAGGCCACAGGCCAGCTCCGGGGGGCCTCAAGGGCTCTAGGAGTGAGGACTCAGAG
CTGCCTCCACAGATGGCTTCTGAGGGATCCAGGCGAGTTCTGCGGACATCATCCCTCTCACGGCCACCA
CTCCCCGTGTGTCCCCAAAAGGAATGGGAAGGGCAAGGCCACCTACGTGACGTGCAGCGCCTATCA
GAAGTCCAGGACTCGGAGATCAGTTCCTCCGAAGGCCGCGAGGTGCACGTGCTGGAGAAGCGGAAAGT
GGGTGGTGGTACGTGAGGTTTGGGGAGCTGGAGGGCTGGGCTCCTTCCCCTACTTGGTGGCCGAGGAGA
ACCAGCAACCTGACACAGCTAGCAAAGAGGGAGACACAGGAAAGAGCTCGCAGAACGAGGGCAAGTCA
CAGCCTGGAAAAGATTGAGAAGCGTGTGACAGGCCCTCAACTGTGAACCAGAGCAAGAGGGCCACCCCA
CCCATCCCCTCGAAGCCTCCCGGGGGCTTCGGCAAGACCTCGGGCACCGTAGCGGTGAAGATGAGGAACG
GGGTCCGGCAAGTGGCCGTGAGGCCCAATCTGTGTTGTGTCTCCGCCACCAAGGACAACAACCTGTC
CTGTGCCCTTCGGAGGAACGAGTCGTAACGGCCACCGACAGCCTCAGAGGTGTCGCGAGGAACTCCTCC
TTTAGCACCGCACGGTCAGCAGCCGCTGAGGCCAAGGGCCGCTGGCCGAGCGGGCTGCCAGCCAGGGCT
CAGAATCGCCCCCTGCTGCCTACCCAGCGCAAAGGCATCCCTGTCTCCCCGTGCGTCCCAAGCCCATAGA
GAAGTCCCAGTTTATCCACAACAACCTCAAGGATGTGTACATCTCGATTGCAGACTATGAGGGGGACGAA
GAGACGGCTGGCTTCCAGGAGGGGTGTCCATGGAGGTGCTGGAGAAGAACCCCAATGGCTGGTGGTACT
GCCAGATCCTGGATGAGGTGAAGCCCTCAAGGCTGGGTACCCTCCAACCTACCTTGAGAAGAAGAACTA
A

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**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

Sgfl-Mlul

**ACCN:**

NM\_001164717

**Insert Size:**

3291 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\\_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]  
Transcript Variant: This variant (2) lacks an in-frame exon in the coding region, compared to variant 1. The encoded isoform (2) is shorter, compared to isoform 1. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.