

## Product datasheet for MR229729

### Sqstm1 (NM\_001290769) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sqstm1 (NM_001290769) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Sqstm1
Synonyms:	A170; OSF-6; Osi; p62; STAP; STONE14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR229729 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGCGTCGTTACGGTGAAGGCCTATCTTCTGGGCAAGGAGGAGGCGACCCGCGAGATCCGCCGCTTCA  
GCTTCTGCTTCAGCCCGGAGCCGGAGGCGGAAGCCCAAGCCGCGCCGGCCGGGGCCCTGCGAGAGGCT  
GCTGAGCCGAGTGGCTGTCTGTCCCCACGCTGAGGCCCTGGCGGCTTCCAGGCGCACTACCGGATGAG  
GATGGGGACTTGGTTGCCTTTCCAGTGATGAGGAGCTGACAATGGCTATGTCCTATGTGAAAGATGACA  
TCTCCGCATCTACATTAAGAGAAGAAGGAGTGCCGGCGGAACATCGCCACCATGTGCTCAGGAGGC  
ACCCGAAACATGGTGCACCCCAATGTGATCTGTGATGGTTGCAACGGGCTGTGGTGGAACTCGCTAT  
AAGTGCAGTGTGTGCCAGACTACGACCTGTGCAGCGTGTGCGAGGGGAAGGGCTGCACAGGGAACACA  
GCAAGCTCATCTTTCCCAACCCCTTTGGCCACCTCTCTGATAGCTTCTCTCATAGCCGCTGGCTTCGGAA  
GCTGAAACATGGACACTTTGGCTGGCCTGGCTGGGAGATGGGCCACCGGGAACGGAGCCACGTCTCT  
CCTCGTGCAGGGGATGGCCGCCCTTGCCTACAGCTGAGTCAGCTTCTGCTCCACCAGAAGATCCCAATG  
TCAATTTCTGAAGAATGTGGGGAGAGTGTGGCAGCTGCCCTCAGCCCTTAGGCATTGAGGTTGACAT  
TGATGTGGAACATGGAGGAAGAGAAGCCGCTGACACCCACTACCCAGAAAGTCCAGCACAGGCACA  
GAAGACAAGAGTAACACTCAGCCAAGCAGCTGCTCTCGGAAGTCAGCAAACCTGACGGGCTGGGGAGG  
GCCTGCTCAGTCTCTGACAGAGCAAATGAAAAAGATAGCCTTGGAGTCGGTGGGACAGCCAGGGAACA  
GATGGAGTCGGGAACTGCTCAGGAGGAGACGATGACTGGACACATTTGTCTTCAAAGAAGTGGACCCA  
TCTACAGAGGCTGATCCCGGCTGATTGAGTCCCTCTCCAGATGCTGTCCATGGGTTTCTCGGATGAAG  
GCGGCTGGCTCACCAGGCTCCTACAGACCAAGAATTACGACATCGGGGCTGCTCTGGACACGATCCAGTA  
TTCGAAGCACCTCCACCATTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR229729 protein sequence  
 Red=Cloning site Green=Tags(s)

MASFTVKAYLLGKEEATREIRFSFCFSPEPEAEAQAAAGGPCERLLSRVAVLFPTLRPGGFQAHYRDE  
 DGDLVAFSSDEELTMAMSYVKDDIFRIYIKEKKECRREHRPPCAQEAPRNMVHPNVICDGCNGPVVGT  
 KCSVCPDYDLCSVCEGKGLHREHSKLI FPNPFGLSDSF SHSRWLRK LKHGHFGWPGWEMGPPGNWSPRP  
 PRAGDGRPCPTAESASAPPEDPNVNF LKNVGESVAAAAL SPLGIEVDIDVEHGGKRSRLPTPTPESSTGT  
 EDKSNTPSSCSSEVSKPDGAGEGPAQSLTEQMKKIALESVGPQEEQMESGNCSGGDDDDWTHLSSKEVDP  
 STEADPRLIESLSQMLSMGF SDEGGWLRLLQTKNYDIGAALDTIQYSKHPPL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001290769

**ORF Size:** 1215 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\\_001290769.1](#), [NP\\_001277698.1](#)

**RefSeq Size:** 1916 bp

**RefSeq ORF:** 1215 bp

**Locus ID:** 18412

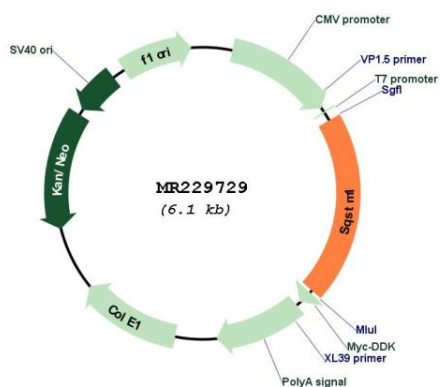
**UniProt ID:** [Q64337](#)

**Cytogenetics:** 11 B1.3

**MW:** 44.2 kDa

**Gene Summary:** Autophagy receptor required for selective macroautophagy (aggrephagy). Functions as a bridge between polyubiquitinated cargo and autophagosomes. Interacts directly with both the cargo to become degraded and an autophagy modifier of the MAP1 LC3 family. Required both for the formation and autophagic degradation of polyubiquitin-containing bodies, called ALIS (aggresome-like induced structures) and links ALIS to the autophagic machinery. Involved in midbody ring degradation (By similarity). May regulate the activation of NFKB1 by TNF-alpha, nerve growth factor (NGF) and interleukin-1. May play a role in titin/TTN downstream signaling in muscle cells. May regulate signaling cascades through ubiquitination. Adapter that mediates the interaction between TRAF6 and CYLD (PubMed:14960283, PubMed:18382763). May be involved in cell differentiation, apoptosis, immune response and regulation of K(+) channels. Involved in endosome organization by retaining vesicles in the perinuclear cloud: following ubiquitination by RNF26, attracts specific vesicle-associated adapters, forming a molecular bridge that restrains cognate vesicles in the perinuclear region and organizes the endosomal pathway for efficient cargo transport (By similarity). Promotes relocalization of 'Lys-63'-linked ubiquitinated TMEM173/STING to autophagosomes (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR229729