

## Product datasheet for **MR226660**

### Zap70 (NM\_009539) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Zap70 (NM_009539) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Zap70
Synonyms:	mrtle; mur; S; Srk; ZAP-; ZAP-70
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR226660 representing NM\_009539  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCGATCCCGCGGCACCTGCCATTTCTTCTATGGCAGCATCTCGGGGCTGAGGCCGAGGAGCACC  
 TGAAGCTGGCAGGCATGGCCGACGGGCTGTTCTCCTGCCAGTGTTCGCTCCTGGCGGCTACGT  
 GCTGTCTGGTGCACGACGTGCGCTTCCACCATTTCCCATCGAGCGCAACTCAACGGCAGTACGCC  
 ATCGCGGGCGGAAGGCGCACTGCGGCCGCGGAGCTCTGCCAGTTCTACTCTCAGGACCCGACGGGC  
 TGCCCTGCAACCTGCGTAAGCCGTGAACCGGCCCGGACTGGAGCCACAGCCGGGGTCTTCGACTG  
 CCTGCGTGATGCTATGGTGCAGACTACGTGCGCCAGACTGGAAGCTGGAGGGCGATGCACTAGAGCAG  
 GCCATCATCAGCCAGGCCACAGGTGGAGAAGCTCATTGCTACCACAGCCACGAGCGAATGCCCTGGT  
 ATCACAGCAGCTGACTCGTGAGGAGGCCGAGCGCAAACCTATTCCGGCCAGCAGCCGACGGCAAGTT  
 CCTGCTGAGGCCCGGAAGGAGCAGGGCACATATGCACTGTCCCTGGTCTATGGGAAAACGTATACCAC  
 TATCTCATCAGCCAGGACAAGGCTGGCAAGTACTGCATCCCCGAAGGCACCAAGTTTGACACGCTCTGGC  
 AGCTGGTGGAGTACCTGAAGCTGAAGGCGGATGGACTAATTTACCCTTGAAGGAGTCTGTCCCAACAG  
 CAGCGCCAGCGCGCAGTTGCTGCACCCACCCTCCAGCCACCCATCCACATTCCTCAGCCTCAGAGA  
 CGAGTGGACACCTGAATCGGACGGATACACCCTGAACCAGCAGCCTTAGCGTCATCGACAGACAAGC  
 CCCGGCCGATGCCATGGACACAAGTGTGTACGAGAGTCCCTACAGCGACCCTGAGGAACTCAAAGACAA  
 GAAGCTTCTTGAAGCGAGAGAATCTCCTCGTGGCGGACATCGAGCTTGGCTGTGGCAACTTTGGCTCC  
 GTGCGCCAGGGAGTCTATCGCATGCGCAAGAAGCAGATTGACGTGGCCATCAAGGTGCTGAAGCAGGGCA  
 CAGAGAAGGCGGACAAAGATGAGATGATGCGAGAGGCCAGATCATGCACCAGCTCGACAACCCCTACAT  
 CGTGGCGCTCATCGGCGTGTGCCAGGCAGAAGCACTCATGCTGGTCTGAGATGGCGGGAGGCGGGCC  
 CTGCACAAGTTCTGCTGGGAAAGAAGGAGGAGATCCCTGTGAGCAATGGGCTGAACTGCTGCACCAGG  
 TGGCCATGGCATGAAGTATTTGGAGGAGAAAACTTTGTGCACCAGCAGCTGGCAGCCGCAATGTTCT  
 ACTGGTCAATCGGCACTATGCCAAGATCAGCGACTTTGGCCTGTCAAAGCCCTGGGTGCTGACGACAGC  
 TATTACACAGCCCGTCTGCAGGAAAGTGGCCTCTGAAGTGGTACGCGCCAGAGTGCATCAACTTTCGGA  
 AGTTCTCCAGCCGAGTACGCTGAGGCTATGGGGTACCATGTGGGAGGCCTTCTCTATGGCCAGAA  
 GCCCTACAAGAAAATGAAGGGCCCCGAGGTCCTGGACTTCATCAAGCAGGGTAAGAGGATGGAATGTCCG  
 CCGGAGTGTCTCTGAGATGTATGCATTATGAGTACTGCTGGATCTACAAGTGGGAGGATCGCCCCG  
 ACTTCTGACTGTGGAACAACGTATGCGGAACATTACTACAGCCTGGCCAGCCGGGCGGAGGGACCC  
 ACAGTGTGAACAGGTGGCCGAGGCTGCATGTGGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR226660 representing NM\_009539  
 Red=Cloning site Green=Tags(s)

MPDPA AHL PFFYGSISR AE EHLKLAGMADGLFLLRQCLRSLGGYVLSLVHDVRFHHPPIERQLNGTYA  
 IAGGKAHCGPAELCQFYSQDPDGLPCNLRKPCNRPPGLEPQPGVFDCLRDAMVRDYVRQTKWLEGDAL EQ  
 AIIISQAPQVEKLIATTAHERMPWYHSSLTREEAERKLYSGQQTGDKFLLRPRKEQGTYSLVYGKTVYH  
 YLISQDKAGKYCIPEGTKFDLWQLVEYLKADGLIYRLKEVCPNSSASA AVAAP TLP AHPSTFTQPQR  
 RVDTLNSDGYTPEPARLASSTDKPRPMPMDTSVYESPYSDPEELKDKKFLKRENLLVADIELGCGNFGS  
 VRQGVYRMRKKQIDVAIKVLKQGT EKADKDEMMREAIQIMHQLDNPYIVRLIGVCQAEALMLVEMAGGGP  
 LHKFLLGKKEEIPVSNVAELLHQVAMGMKYLEEKNFVHRDLAARNVLLVNRHYAKISDFGLSKALGADDS  
 YYTARSAGKWPLKWAYPECINFRKFSRSRSDVWSYGVTMWEAFSYGQKPYKMKGP EVDLFIKQGRMECP  
 PECPPEMYALMSDCWIYKWEDRPDFLTVEQRMNRYYSLASRAEGPPQCEQVAEAAACG

**TR**TRPLEQKLISEEDLAANDILDYKDDDDK V

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9009\\_h11.zip](https://cdn.origene.com/chromatograms/mm9009_h11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_009539

**ORF Size:** 1854 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\\_009539.3](#), [NP\\_033565.2](#)

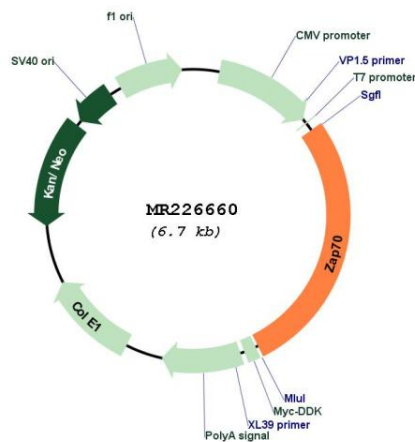
**RefSeq Size:** 2180 bp

**RefSeq ORF:** 1857 bp

**Locus ID:** 22637  
**UniProt ID:** [P43404](#)  
**Cytogenetics:** 1 15.41 cM  
**MW:** 70.6 kDa

**Gene Summary:** This gene encodes a member of the protein tyrosine kinase family. The encoded protein is essential for development of T lymphocytes and thymocytes, and functions in the initial step of T lymphocyte receptor-mediated signal transduction. A mutation in this gene causes chronic autoimmune arthritis, similar to rheumatoid arthritis in humans. Mice lacking this gene are deficient in alpha-beta T lymphocytes in the thymus. In humans, mutations in this gene cause selective T-cell defect, a severe combined immunodeficiency disease characterized by a selective absence of CD8-positive T lymphocytes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

### Product images:



Circular map for MR226660