

Product datasheet for **RC200413**

SYK (NM_003177) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SYK (NM_003177) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SYK
Synonyms:	IMD82; p72-Syk
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC200413 representing NM_003177
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCAGCAGCGCATGGCTGACAGCGCCAACCACTGCCCTTCTTTTTCGGCAACATCACCCGGGAGG
 AGGCAGAAGATTACCTGGTCCAGGGGGCATGAGTGATGGGCTTTATTTGCTGCGCCAGAGCCGCAACTA
 CCTGGGTGGCTTCGCCCTGTCCGTGGCCACGGGAGGAAGGCACACCACTACACCATCGAGCGGGAGCTG
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 AGGAGTCTGATGGCTGGTCTGCCTCCTCAAGAAGCCCTCAACCGGCCCAAGGGTGCAGCCCAAGAC
 TGGGCCCTTTGAGGATTTGAAGGAAAACCTCATCAGGGAATATGTGAAGCAGACATGGAACCTGCAGGT
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 CCTGCGACTTGGTCAGCGGGTGAATAATCTCAAGAATCAAATCATACTCCTTCCCAAAGCTGGCCACA
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 CCCTACGCGGACCCTGAGGAGATCAGGCCAAGGAGGTTTACCTGGACCGAAAGCTGCTGACGCTGGAAG
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 GGATAAGAACATCATAGA
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 GACTCTCCAAAGCACTGCGTGTGATGAAA
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 CGCTA
 TGTAGAGAAAGGAGAGCGGATGGGGTGCCTGCAGGGTGTCCAAGAGAGATGTACGATCTCATGAATCT
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 TATGACGTGGTGAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC200413 representing NM_003177
Red=Cloning site Green=Tags(s)

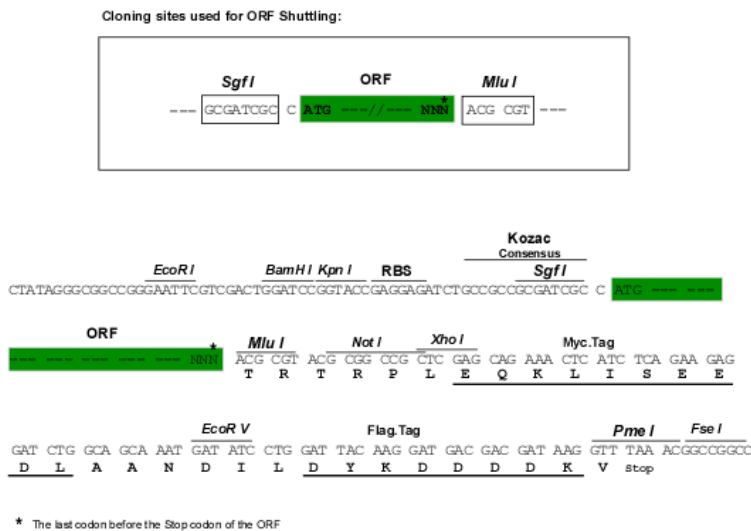
MASSGMADSANHLPFFFGNITREEAEDYLVQGGMSDGLYLLRQSRNYLGGFALSVAHGRKAHHYTIEREL
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 QALEQAIISQKPQLEKLIATTAHEKMPWFHGKISREESEQIVLIGSKTNGKFLIRARDNNGSYALCLLHE
 GKVLHYRIDKDKTGLSIPGKKFDTLWQLVEHYSYKADGLLRVLTVPQCQKIGTQGNVNFVGGRPQLPGSH
 PATWSAGGIISRIKSYSFPKPGHRKSSPAQGNRQESTVSFNPEPELAPWAADKGPQREALPMDTEVYES
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 ANVMQQLDNPIYVRMIGICEAESWMLVMEAEGLPNKYLQQRNRHVKDKNIIELVHQVSMGMKYLEESNF
 VHRDLAARNVLLVTQHYAKISDFGLSKALARADENYYKAQTHGKWPVKWYAPECINYYKFSKSDVWSFGV
 LMWEAFSYGQKPYRGMKGSEVTAMLEKGERMGCAPAGCPREMYDLMNLCTYDVENRPGFAAVELRLRNY
 YDVVN

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2453_e04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003177

ORF Size: 1905 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_003177.3](#), [NP_003168.2](#)

RefSeq Size: 2672 bp

RefSeq ORF: 1908 bp

Locus ID: 6850

UniProt ID: [P43405](#)

Cytogenetics: 9q22.2

Domains: pkinase, SH2, TyrKc, S_TKc

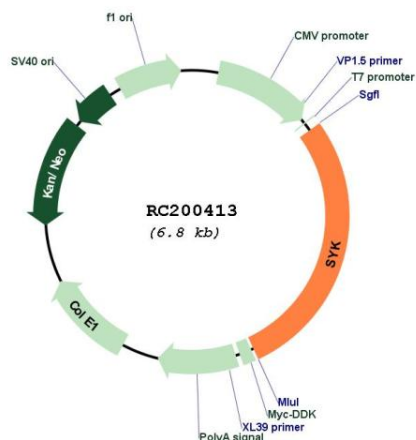
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: B cell receptor signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Natural killer cell mediated cytotoxicity

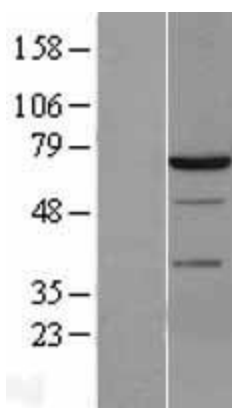
MW: 71.9 kDa

Gene Summary: This gene encodes a member of the family of non-receptor type Tyr protein kinases. This protein is widely expressed in hematopoietic cells and is involved in coupling activated immunoreceptors to downstream signaling events that mediate diverse cellular responses, including proliferation, differentiation, and phagocytosis. It is thought to be a modulator of epithelial cell growth and a potential tumour suppressor in human breast carcinomas. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2010]

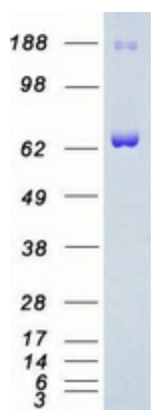
Product images:



Circular map for RC200413



Western blot validation of overexpression lysate (Cat# [LY401101]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200413 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SYK protein (Cat# [TP300413]). The protein was produced from HEK293T cells transfected with SYK cDNA clone (Cat# RC200413) using MegaTran 2.0 (Cat# [TT210002]).