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Product datasheet for RC222012

SHARPIN (NM_030974) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SHARPIN (NM_030974) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SHARPIN
Synonyms:	SIPL1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC222012 representing NM_030974
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGCCGCCAGCGGGCGGGGCGGCGGCGGCGGCCTCGGACTTGGGCTCCGCCGCAGTGCTCTTGGCTG
TGCACGCCGCGGTGAGGCCGCTGGGCGCCGGGCCAGACGCCGAGGCACAGCTGCGGAGGCTGCAGCTGAG
CGCGGACCCTGAGCGGCCTGGGCGCTTCCGGCTGGAGCTGCTGGGCGCGGGACCTGGGGCGGTTAATTTG
GAGTGGCCCCTGGAGTCAGTTTCCTACACCATCCGAGGCCCCACCCAGCACGAGCTACAGCCTCCACCAG
GAGGGCCTGGAACCCTCAGCCTGCACTTCCTCAACCCTCAGGAAGCTCAGCGGTGGGCAGTCCTAGTCCG
AGGTGCCACCGTGGAAGGACAGAATGGCAGCAAGAGCAACTCACCACCAGCCTTGGGCCCAGAAGCATGC
CCTGTCTCCCTGCCCAGTCCCCCGGAAGCCTCCACACTCAAGGGCCCTCCACCTGAGGCAGATCTTCCTA
GGAGCCCTGGAAACTTGACGGAGAGAGAAGAGCTGGCAGGGAGCCTGGCCCGGGCTATTGCAGGTGGAGA
CGAGAAGGGGGCAGCCCAAGTGGCAGCCGTCCTGGCCCAGCATCGTGTGGCCCTGAGTGTTCAGCTTCAG
GAGGCCTGCTTCCCACCTGGCCCCATCAGGCTGCAGGTCACACTTGAAGACGCTGCCTCTGCCGCATCCG
CCGCGTCCTCTGCACACGTTGCCCTGCAGGTCCACCCCCACTGCACTGTTGCAGCTCTCCAGGAGCAGGT
GTTCTCAGAGCTCGGTTTCCCGCCAGCCGTGCAACGCTGGGTCATCGGACGGTGCCTGTGTGTGCCTGAG
CGCAGCCTTGCCTCTTACGGGGTTCGGCAGGATGGGGACCCTGCTTTCCTCTACTTGCTGTCAGCTCCTC
GAGAAGCCCCAGCCACAGGACCTAGCCCTCAGCACCCCCAGAAGATGGACGGGGAACTTGGACGCTTGTT
TCCCCCATCATTGGGGCTACCCCCAGGCCCCCAGCCAGCTGCCTCCAGCCTGCCCAGTCCACTCCAGCCC
AGCTGGTCCTGTCCTTCCTGCACCTTCATCAATGCCCCAGACCGCCCTGGCTGTGAGATGTGTAGCACCC
AGAGGCCCTGCACTTGGGACCCCCTTGCTGCAGCTTCCACC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC222012 representing NM_030974
Red=Cloning site Green=Tags(s)

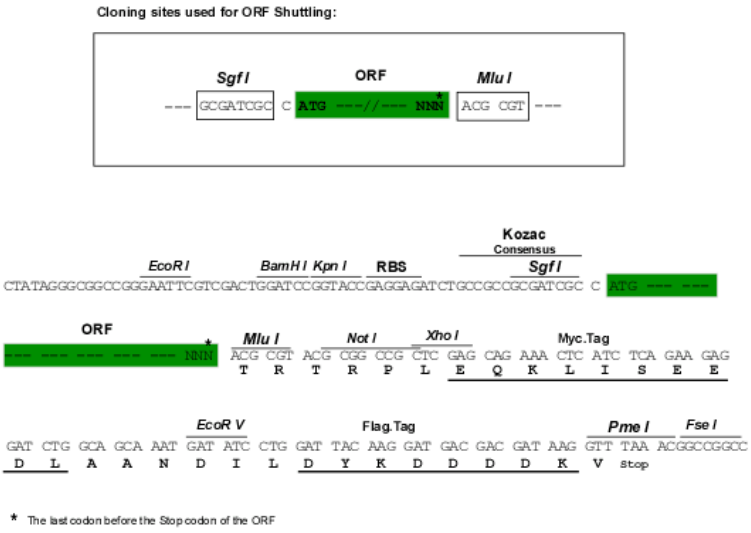
MAPPAGGAAAAASDLGSAAVLLAVHAAVRPLGAGPDAEAQLRRLQLSADPERPGRFRLELLGAGPGAVNL
EWPLESVSYTIRGPTQHELQPPPGGPGTLSLHFLNPQEAQRWAVLVRGATVEGQNGSKSNSPPALGPEAC
PVSLPSPPEASTLKGPPPEADLPRSPGNLTEREELAGSLARAIAGGDEKGAAQVAAVLAQHRVALSVQLQ
EACFPPGPIRLQVTLEDAASAASAASSAHVALQVHPHCTVAALQEQVFSELGFPPAVQRWVIGRCLCVPE
RSLASYGVRQDGDPAFLYLLSAPREAPATGPSPQHPQKMDGELGRLFPPSLGLPPGPQPAASSLPSPLQP
SWSCPSCTFINAPDRPGCEMCSTQRPCTWDPLAAAST

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8039_d05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_030974

ORF Size: 1161 bp

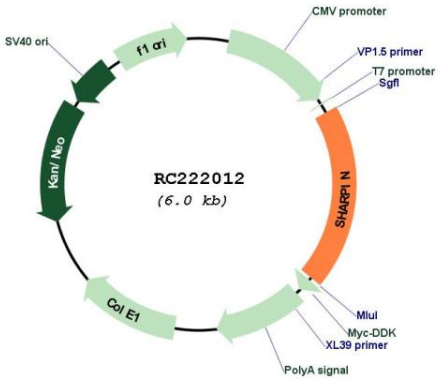
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

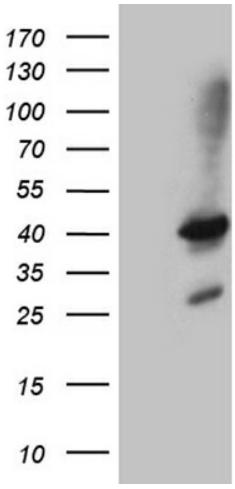
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_030974.4
RefSeq Size:	1765 bp
RefSeq ORF:	1164 bp
Locus ID:	81858
UniProt ID:	Q9H0F6
Cytogenetics:	8q24.3
Domains:	zf-RanBP
Protein Families:	Druggable Genome
MW:	39.8 kDa
Gene Summary:	Component of the LUBAC complex which conjugates linear polyubiquitin chains in a head-to-tail manner to substrates and plays a key role in NF-kappa-B activation and regulation of inflammation. LUBAC conjugates linear polyubiquitin to IKBKG and RIPK1 and is involved in activation of the canonical NF-kappa-B and the JNK signaling pathways. Linear ubiquitination mediated by the LUBAC complex interferes with TNF-induced cell death and thereby prevents inflammation. LUBAC is recruited to the TNF-R1 signaling complex (TNF-RSC) following polyubiquitination of TNF-RSC components by BIRC2 and/or BIRC3 and to conjugate linear polyubiquitin to IKBKG and possibly other components contributing to the stability of the complex. Together with OTULIN, the LUBAC complex regulates the canonical Wnt signaling during angiogenesis.[UniProtKB/Swiss-Prot Function]

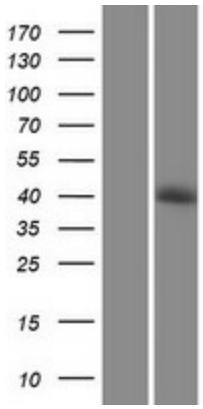
Product images:



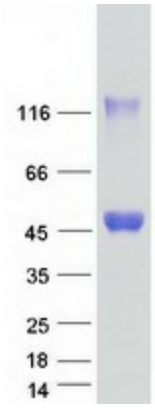
Circular map for RC222012



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SHARPIN (Cat# RC222012, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SHARPIN (Cat# [TA811607])(1:2000). Positive lysates [LY410637] (100ug) and [LC410637] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY410637]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222012 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SHARPIN protein (Cat# [TP322012]). The protein was produced from HEK293T cells transfected with SHARPIN cDNA clone (Cat# RC222012) using MegaTran 2.0 (Cat# [TT210002]).