

# **Product datasheet for RC224336**

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## Sumo 2 (SUMO2) (NM\_006937) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Sumo 2 (SUMO2) (NM\_006937) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: Sumo 2

Synonyms: HSMT3; Smt3A; SMT3B; SMT3H2; SUMO3

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC224336 representing NM\_006937

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

**TCTAC** 

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC224336 representing NM\_006937

Red=Cloning site Green=Tags(s)

MADEKPKEGVKTENNDHINLKVAGQDGSVVQFKIKRHTPLSKLMKAYCERQGLSMRQIRFRFDGQPINET

DTPAQLEMEDEDTIDVFQQQTGGVY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mg3774">https://cdn.origene.com/chromatograms/mg3774</a> h01.zip

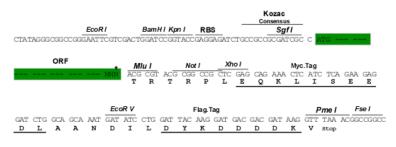
**Restriction Sites:** Sgfl-Mlul





#### **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_006937

ORF Size: 285 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 006937.4

RefSeq Size: 1066 bp RefSeq ORF: 288 bp Locus ID: 6613



UniProt ID:P61956Cytogenetics:17q25.1Domains:UBQ

**Protein Families:** Druggable Genome

**MW:** 10.7 kDa

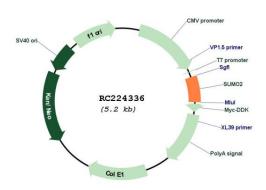
**Gene Summary:** This gene encodes a protein that is a member of the SUMO (small ubiquitin-like modifier)

protein family. It functions in a manner similar to ubiquitin in that it is bound to target proteins as part of a post-translational modification system. However, unlike ubiquitin which targets proteins for degradation, this protein is involved in a variety of cellular processes, such as nuclear transport, transcriptional regulation, apoptosis, and protein stability. It is not active until the last two amino acids of the carboxy-terminus have been cleaved off.

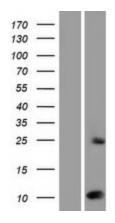
Numerous pseudogenes have been reported for this gene. Alternate transcriptional splice

variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jul 2008]

### **Product images:**

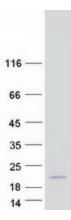


Circular map for RC224336



Western blot validation of overexpression lysate (Cat# [LY416283]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224336 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified SUMO2 protein (Cat# [TP324336]). The protein was produced from HEK293T cells transfected with SUMO2 cDNA clone (Cat# RC224336) using MegaTran 2.0 (Cat# [TT210002]).