

## Product datasheet for **RC204846**

### **SMPDL3B (NM\_001009568) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SMPDL3B (NM_001009568) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SMPDL3B
Synonyms:	ASML3B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204846 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAGGCTGCTCGCCTGGCTGATTTTCTGGCTAACTGGGGAGGTGCCAGGGCTGAACCAGGGAAGTTCT  
GGCACATCGCTGACCTGCACCTTGACCCGACTACAAGGTATCCAAGACCCCTCCAGGTGTGCCATC  
AGCTGGATCCCAGCCAGTGCCCGACGCAGGCCCTGGGGTACTACCTCTGTGATTCTCCCTGGGCCCTC  
ATCAACTCTCCATCTATGCCATGAAGGAGATTGAGCCAGAGCCAGACTTCATTCTGGACTGGTGATG  
ACACGCCTCATGTGCCGATGAGAACTGGGAGAGGCAGCTGTACTGAAATTGTGGAACGCCTGACCAA  
GCTCATCAGAGAGGTCTTCCAGATACTAAAGTCTATGCTGCTTTGGGAAATCATGATTTTCACCCAAA  
AACCAGTTCCCAGCTGGAAGTAACAACATCTACAATCAGATAGCAGAATATGGAACCCCTGGCTTAGTA  
ATGAGTCCATCGCTCTCTCAAAAAAGGTGCCTTCTACTGTGAGAAGCTGCCGGGTCCCAGCGGGCTGG  
GCGAATTGTGGTCTCAACACCAATCTGTACTATACCAGCAATGCGCTGACAGCAGACATGGCGGACCT  
GGCCAGCAGTTCCAGTGGCTGGAAGATGTGCTGACCGATGCATCCAAAGCTGGGGACATGGTGTACATTG  
TCGGCCACGTGCCCGGGTCTTTGAGAAGACGCAAAACAAGGCATGGTCCGGGAGGGCTTCAATGA  
AAAATACCTGAAGGTGGTCCGGAAGCATCATCGCGTCATAGCAGGGCAGTCTTCGGGCACCACCACCC  
GACAGCTTTCGGATGCTCTATGATGATGCAGGTGTCCCATAAGCGCCATGTTTCACACCTGGAGTCA  
CCCCATGAAAACACATTACCTGGAGTGGTCAATGGGGCCAACAATCCAGCCATCCGGGTGTTCAATA  
TGACCGAGCCACACTGAGCCTGAAGGTCAGGAGTCTGCGGAGGCCAGAGGAGGAGGGTGGGAGGGCTT  
AAATGCATCACCACCTCCCTCACTCTCAGCTTATCCACCTCCCTGACCACTGAGCCTCAGGAAGGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC204846 protein sequence  
Red=Cloning site Green=Tags(s)

MRL~~L~~A~~W~~LIFLANWGGARAEPGKFWHIADLHLDPDYK~~V~~SKDPFQVCPSAGSQVPDAGPWGDYLCDSPWAL  
 INSS~~I~~YAMKEIEPEPDFILWTGDDTPHPDEKLGEAAVLEIVERLTKLIREVFPDTKVYAALGNHDFHPK  
 NQFPAGSNNIYNQIAELWKPWLSNESIALFKKGAFYCEKLPGPSGAGRIVVLNTNLYYTSNALTADMADP  
 GQQFQWLEDVLTASKAGDMVYIVGHVPPGF~~F~~EKTQNKAWFREGFNEKYLKVVRRK~~H~~HRVIAQ~~Q~~FFGHHHT  
 DSFRMLYDDAGVPI~~S~~AMFITPGVTPWK~~T~~TLPGVVNGANNPAIRVFEYDRATLSLKV~~R~~SPA~~E~~ARGGGWEGL  
 KCITTFPHSQLIHLPLTTEPQEG

TRTRPLE~~Q~~KLISEEDLAANDILDYK~~D~~DDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6437\\_e11.zip](https://cdn.origene.com/chromatograms/mk6437_e11.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



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

**ACCN:** NM\_001009568

**ORF Size:** 1119 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\\_001009568.2](#)

**RefSeq Size:** 1611 bp

**RefSeq ORF:** 1122 bp

**Locus ID:** 27293

**UniProt ID:** [Q92485](#)

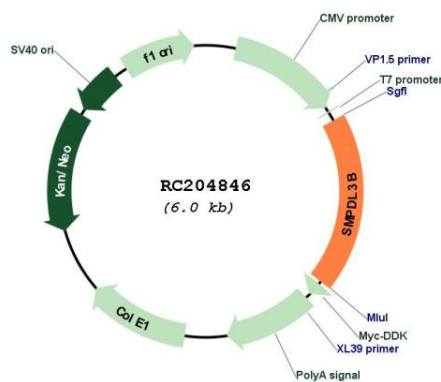
**Cytogenetics:** 1p35.3

**Protein Families:** Secreted Protein

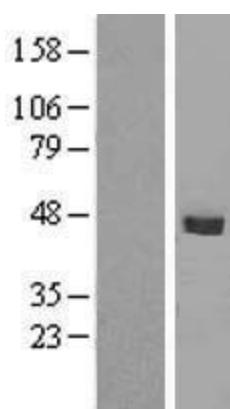
**MW:** 41.7 kDa

**Gene Summary:** Lipid-modulating phosphodiesterase (PubMed:26095358). Active on the surface of macrophages and dendritic cells and strongly influences macrophage lipid composition and membrane fluidity. Acts as a negative regulator of Toll-like receptor signaling (By similarity). Has in vitro phosphodiesterase activity, but the physiological substrate is unknown (PubMed:26095358). Lacks activity with phosphocholine-containing lipids, but can cleave CDP-choline, and can release phosphate from ATP and ADP (in vitro) (By similarity). [UniProtKB/Swiss-Prot Function]

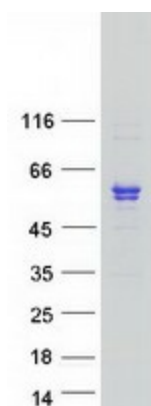
### Product images:



Circular map for RC204846



Western blot validation of overexpression lysate (Cat# [LY422916]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204846 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SMPDL3B protein (Cat# [TP304846]). The protein was produced from HEK293T cells transfected with SMPDL3B cDNA clone (Cat# RC204846) using MegaTran 2.0 (Cat# [TT210002]).