

## Product datasheet for RC211261

### SMUBP2 (IGHMBP2) (NM\_002180) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SMUBP2 (IGHMBP2) (NM_002180) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SMUBP2
Synonyms:	CATF1; CMT2S; HCSA; HMN6; SMARD1; SMUBP2; ZFAND7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211261 representing NM_002180 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCTCGGCAGCTGTGGAGAGCTTCGTGACCAAGCAACTGGACCTGCTGGAGCTCGAGAGAGACGCGG  
AGGTGGAGGAGCGCAGGTCTGGCAGGAGAATCTCTCTGAAAGAGCTCCAGAGCCGAGGCGTGTGTTT  
GCTGAAGCTGCAGGTATCCAGCCAGCGCACTGGGCTGTACGGACGGCTGCTGGTCACCTTTGAGCCAGG  
CGATACGGGTCGCGGCAGCTCTCCAGTAACAGCTTTACTTCTGGTGATATCGTGGCCCTGTACGATG  
CTGCTAATGAGGGCAGTCAGCTGCCACTGGGATCTTGACCCGGGTACCCAGAAGTCGGTCACGGTGGC  
CTTTGATGAGTCCACGATTTCCAGTTGAGCTTGACCGAGAGAATTCCTACAGACTGTTAAAATTGCC  
AATGATGTCACTTACAGCGACTGAAAAAGCCCTGATTGCTCTAAAGAAGTATCATTCTGGCCAGCCT  
CCTCACTCATAGAAGTGCTCTTTGGCAGATCTGCTCCCAGTCTGCCAGTGAAATACACCCGCTGACATT  
CTTCAACACCTGCCTGGACACCTCCAGAAAGAAGCGGTTTCATTTGCGCTGTCTCAGAAAGAACTTGCC  
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AAGGCTTAAAGTTCTGTGCTGCGCCCCCTCAACATCGCCGTGGACAATCTGGTGGAGCGCCTGGCTCT  
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GATGCGGTTTTAGCGCGGAGCGACAGTGCCAGATTGTTGCAGATATCAGGAAGGACATCGACCAGTCT  
TTGTGAAAAACAAAAGACCCAGGATAAGAGAGAGAAAAGTAATTTTCGAAATGAAATTAAGCTGTTAAG  
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GTGGACACCGCCGGCTGCGGGCTGTTTGTAGCTGGAGGAGGAGGACGAACAGTCGAAAGGGAACCCCTGGCG  
 AAGTCCGCCTCGTCAGTTTGACATCCAGGCTCTGGTGGACGCTGGTGTCCAGCCCGTGACATTGCTGT  
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 AGCAACCAGAGGACCGCCGAGGAAGGAGAGGGGGACG

ACGCGTACGCGGCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAGGTTTAA

**Protein Sequence:**

>RC211261 representing NM\_002180  
 Red=Cloning site Green=Tags(s)

MASAAVESFVTKQLDLLELERDAEVEERRSWQENISLKEQLQSRGVCLLKLQVSSQRTGLYGRLLVTFEPR  
 RYGSAALPSNSFTSGDIVGLYDAANESQLATGILTRVTQKSVTVAFDESHDFQLSLDRENSYRLLKLA  
 NDVTYRRLKALIALKKYHSGPASSLIEVLFGRSAPSPASEIHPLTFFNTCLDTSQKEAVSFALSQKELA  
 I IHGPPGTGKTTTVEIILQAVKQGLKVLCCAPSNIAVDNLVERLALCKQRILRLGHPARLLESIQQHSL  
 DAVLARSDSAQIVADIRKDIDQVFVKNKKTQDKREKSNFRNEIKLLRKLKEREAAAMLESLSANVVLA  
 TNTGASADGPLKLLPESYFDVVVIDECAQALEASCIWIPLLKARKCILAGDHLKLPPTTVSHKAALAGLSL  
 SLMERLAEYGARVVRTLTVQYRMHQAIMRWASDTMYLGQLTAHSSVARHLLRDLPGVAATEETGVPLLL  
 VDTAGCGLFELEEEDEQSKGNPGEVRLVSLHIQALVDAGVPARDIAVVSPYNLQVDLLRQSLVHRHPELE  
 IKSVDGFGGREKEAVILSFVRSNRKGEVGFLEADRRINAVTRARRHVAVICDSRTVNNHAFKTLVEYF  
 TQHGEVRTAFEYLDIVPENYSHENSQGS SHAATKPQGPAASTRTGSQRQEGGQEAAPARQGRKKPAGK  
 SLASEAPSQPSLNGGSPEGVESQDGDHFRAMIVFEFMAKMKMLEFPPSLNSHDRLRVHQIAEEHGLRHD  
 SSGEGKRRFITVSKRAPRPRPAAALGPPAGTGGPAPLQPVPTPAQTEQPPREQRGPDQPDRLHLRLRQR  
 VRSAQGPASKEQASGQKLEPKKKKKAKGHPATDLPTEEDFEALVSAAVKADNTCGFAKCTAGVTTLG  
 QFCQLCSRRYCLSHHLPEIHGCGERARAHARQIRISREGVLVYAGSGTKNGSLDPAKRAQLQRRLDKLSEL  
 SNQRTSRRKERGT

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg2917\\_d01.zip](https://cdn.origene.com/chromatograms/mg2917_d01.zip)

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_002180

**ORF Size:** 2979 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.

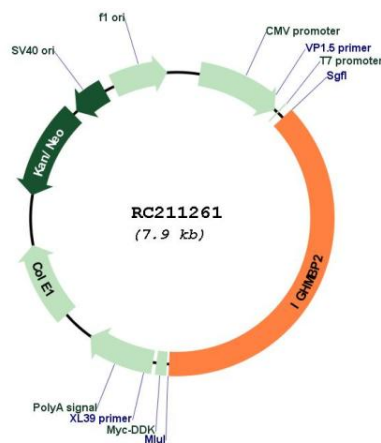
**RefSeq:** [NM\\_002180.3](#)

**RefSeq Size:** 3955 bp

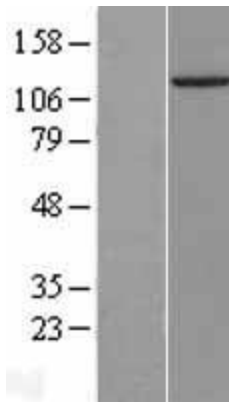
**RefSeq ORF:** 2982 bp

**Locus ID:** 3508  
**UniProt ID:** [P38935](#)  
**Cytogenetics:** 11q13.3  
**Domains:** ZnF\_AN1, R3H, DEAD, AAA  
**Protein Families:** Transcription Factors  
**MW:** 109 kDa  
**Gene Summary:** This gene encodes a helicase superfamily member that binds a specific DNA sequence from the immunoglobulin mu chain switch region. Mutations in this gene lead to spinal muscle atrophy with respiratory distress type 1. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC211261



Western blot validation of overexpression lysate (Cat# [LY419482]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211261 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).