

## Product datasheet for **SC322971**

### PCBP2 (NM\_001128914) Human Untagged Clone

#### Product data:

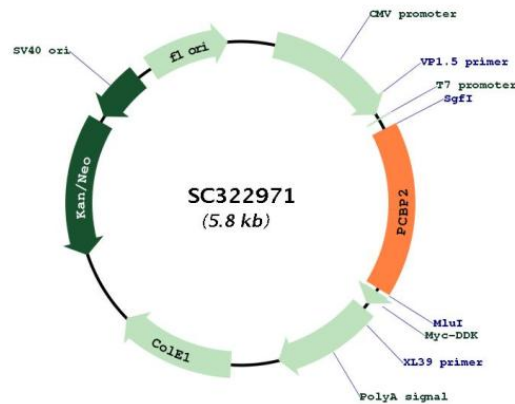
Product Type:	Expression Plasmids
Product Name:	PCBP2 (NM_001128914) Human Untagged Clone
Tag:	Tag Free
Symbol:	PCBP2
Synonyms:	hnRNP-E2; HNRNPE2; HNRPE2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC322971 representing NM_001128914. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC CGCATCGCC
ATGGACACCGGTGTGATTGAAGGTGATTAAATGTCACTCTACCATCCGGCTACTTATGCATGGAAAG
GAAGTTGGCAGTATCATCGAAAGAAAGGAGAATCAGTTAAGAAGATGCGCGAGGAGAGTGGTGCACGT
ATCAACATCTCAGAAGGGAATTGCTCTGAGAGAATTATCACTTTGGCTGGACCCACTAATGCCATCTTC
AAAGCCTTTGCTATGATCATTGACAACTGGAAGAGGACATAAGCAGCTCTATGACCAATAGCACAGCT
GCCAGTAGACCCCGGTACCCTGAGGCTGGTGGTCCCTGCTAGTCAGTGTGGCTCTCTATTGGAAAA
GGTGGATGCAAGATCAAGGAAATACGAGAGAGTACAGGGGCTCAGGTCCAGGTGGCAGGGGATATGCTA
CCCAACTCAACTGAGCGGCCATCACTATTGCTGGCATTCCACAATCCATCATTGAGTGTGCAAACAG
ATCTGCGTGGTCAATGTTGGAGTCCCCCGAAGGGCGTGACCATCCCGTACCGGCCCAAGCCGTCCAGC
TCTCCGGTCATCTTTCAGGTGGTCCAGGCTATACCATCAAGGACAGTATGCCATTCCACAGCCAGAT
TTGACCAAGCTGCACCAGTTGGCAATGCAACAGTCTCATTTTCCCATGACGCATGGCAACACCGGATTC
AGTGCAGGTTTGGATGCATCTGCTCAGACTACTTCTCATGAACTCACCATTCCAAACGATTTGATTGGC
TGCATAATCGGGCGTCAAGGCGCCAAAATCAATGAGATCCGTGAGTGTCTGGGGCGCAGATCAAATT
GCGAACCAGTGAAGGATCTACTGATAGGCAGGTTACCATCACTGGATCTGCTGCCAGCATTAGCCTG
GCTCAATATCTAATCAATGTCAAGGCTTTCCTCGGAGACGGGTGGCATGGGGAGCAGCTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI



Plasmid Map:



ACCN: NM\_001128914

Insert Size: 957 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_001128914.1](#)

RefSeq Size: 3043 bp

RefSeq ORF: 957 bp

Locus ID: 5094  
UniProt ID: [Q15366](#)  
Cytogenetics: 12q13.13  
MW: 33.5 kDa

**Gene Summary:** The protein encoded by this gene appears to be multifunctional. Along with PCBP-1 and hnRNPK, it is one of the major cellular poly(rC)-binding proteins. The encoded protein contains three K-homologous (KH) domains which may be involved in RNA binding. Together with PCBP-1, this protein also functions as a translational coactivator of poliovirus RNA via a sequence-specific interaction with stem-loop IV of the IRES, promoting poliovirus RNA replication by binding to its 5'-terminal cloverleaf structure. It has also been implicated in translational control of the 15-lipoxygenase mRNA, human papillomavirus type 16 L2 mRNA, and hepatitis A virus RNA. The encoded protein is also suggested to play a part in formation of a sequence-specific alpha-globin mRNP complex which is associated with alpha-globin mRNA stability. This multiexon structural mRNA is thought to be retrotransposed to generate PCBP-1, an intronless gene with functions similar to that of PCBP2. This gene and PCBP-1 have paralogous genes (PCBP3 and PCBP4) which are thought to have arisen as a result of duplication events of entire genes. This gene also has two processed pseudogenes (PCBP2P1 and PCBP2P2). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2018]

Transcript Variant: This variant (7) uses an alternate in-frame splice site and lacks two alternate in-frame exons compared to variant 1. The resulting isoform (g) has the same N- and C-termini but is shorter compared to isoform a.