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# Product datasheet for SC107825

## CERT1 (NM_031361) Human Untagged Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | CERT1 (NM_031361) Human Untagged Clone |
| **Tag:** | Tag Free |
| **Symbol:** | CERT1 |
| **Synonyms:** | CERT; CERTL; COL4A3BP; GPBP; MRD34; STARD11 |
| **Mammalian Cell Selection:** | None |
| **Vector:** | pCMV6-XL5 |
| **E. coli Selection:** | Ampicillin (100 ug/mL) |

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**Fully Sequenced ORF:**

>NCBI ORF sequence for NM_031361, the custom clone sequence may differ by one or more nucleotides

ATGTCGGATAATCAGAGCTGGAACTCGTCGGGCTCGGAGGAGGATCCAGAGACGGAGTCTGGGCCGCCTG
TGGAGCGCTGCGGGGTCCTCAGTAAGTGGACAAACTACATTCATGGGTGGCAGGATCGTTGGGTAGTTTT
GAAAAATAATGCTCTGAGTTACTACAAATCTGAAGATGAAACAGAGTATGGCTGCAGAGGATCCATCTGT
CTTAGCAAGGCTGTCATCACACCTCACGATTTTGATGAATGTCGATTTGATATTAGTGTAAATGATAGTG
TTTGGTATCTTCGTGCTCAGGATCCAGATCATAGACAGCAATGGATAGATGCCATTGAACAGCACAAGAC
TGAATCTGGATATGGATCTGAATCCAGCTTGCGTCGACATGGCTCAATGGTGTCCCTGGTGTCTGGAGCA
AGTGGCTACTCTGCAACATCCACCTCTTCATTCAAGAAAGGCCACAGTTTACGTGAGAAGTTGGCTGAAA
TGGAAACATTTAGAGACATCTTATGTAGACAAGTTGACACGCTACAGAAGTACTTTGATGCCTGTGCTGA
TGCTGTCTCTAAGGATGAACTTCAAAGGGATAAAGTGGTAGAAGATGATGAAGATGACTTTCCTACAACG
CGTTCTGATGGTGACTTCTTGCATAGTACCAACGGCAATAAAGAAAAGTTATTTCCACATGTGACACCAA
AAGGAATTAATGGTATAGACTTTAAAGGGGAAGCGATAACTTTTAAAGCAACTACTGCTGGAATCCTTGC
AACACTTTCTCATTGTATTGAACTAATGGTTAAACGTGAGGACAGCTGGCAGAAGAGACTGGATAAGGAA
ACTGAGAAGAAAAGAAGAACAGAGGAAGCATATAAAAATGCAATGACAGAACTTAAGAAAAAATCCCACT
TTGGAGGACCAGATTATGAAGAAGGCCCTAACAGTCTGATTAATGAAGAAGAGTTCTTTGATGCTGTTGA
AGCTGCTCTTGACAGACAAGATAAAATAGAAGAACAGTCACAGAGTGAAAAGGTGAGATTACATTGGCCT
ACATCCTTGCCCTCTGGAGATGCCTTTTCTTCTGTGGGGACACATAGATTTGTCCAAAAGGTTGAAGAGA
TGGTGCAGAACCACATGACTTACTCATTACAGGATGTAGGCGGAGATGCCAATTGGCAGTTGGTTGTAGA
AGAAGGAGAAATGAAGGTATACAGAAGAGAAGTAGAAGAAAATGGGATTGTTCTGGATCCTTTAAAAGCT
ACCCATGCAGTTAAAGGCGTCACAGGACATGAAGTCTGCAATTATTTCTGGAATGTTGACGTTCGCAATG
ACTGGGAAACAACTATAGAAAACTTTCATGTGGTGGAAACATTAGCTGATAATGCAATCATCATTTATCA
AACACACAAGAGGGTGTGGCCTGCTTCTCAGCGAGACGTATTATATCTTTCTGTCATTCGAAAGATACCA
GCCTTGACTGAAAATGACCCTGAAACTTGGATAGTTTGTAATTTTTCTGTGGATCATGACAGTGCTCCTC
TAAACAACCGATGTGTCCGTGCCAAAATAAATGTTGCTATGATTTGTCAAACCTTGGTAAGCCCACCAGA
GGGAAACCAGGAAATTAGCAGGGACAACATTCTATGCAAGATTACATATGTAGCTAATGTGAACCCTGGA
GGATGGGCACCAGCCTCAGTGTTAAGGGCAGTGGCAAAGCGAGAGTATCCTAAATTTCTAAAACGTTTTA
CTTCTTACGTCCAAGAAAAAACTGCAGGAAAGCCTATTTTGTTCTAG

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM_031361 unedited
GTTGGATTTGTAACCGACTTACTATAGGCGGCCGCGCAATTCGCACGAGGGGGTAGGCTT
CCTTCACCGCTCGTCCTCCTTCCTCGCTCCGCTCGGTGTCAGGCGCGGCGGCGGCGCGGC
GGGCGGACTTCGTCCCTCCTCCTGCTCCCCCCCACACCGGAGCGGGCACTCTTCGCTTCG
CCATCCCCCGACCCTTCACCCCGAGGACTGGGCGCCTCCTCCGGCGCAGCTGAGGGAGCG
GGGGCCGGTCTCCTGCTCGGTTGTCGAGCCTCCATGTCGGATAATCAGAGCTGGAACTCG
TCGGGCTCGGAGGAGGATCCAGAGACGGAGTCTGGGCCGCCTGTGGAGCGCTGCGGGGTC
CTCAGTAAGTGGACAAACTACATTCATGGGTGGCAGGATCGTTGGGTAGTTTTGAAAAAT
AATGCTCTGAGTTACTACAAATCTGAAGATGAAACAGAGTATGGCTGCAGAGGATCCATC
TGTCTTAGCAAGGCTGTCATCACACCTCACGATTTTGATGAATGTCGATTTGATATTAGT
GTAAATGATAGTGTTTGGTATCTTCGTGCTCAGGATCCAGATCATAGACAGCAATGGATA
GATGCCATTGAACAGCACAAGACTGAATCTGGATATGGATCTGAATCCAGCTTGCGTCGA
CATGGCTCAATGGTGTCCCTGGTGTCTGGAGCAAGTGGCTACTCTGCAACATCCACCTCT
TCATTCAAGAAAGCCACAGTTTACGTGAGAAAGTGGCTGAAATGGAAACATTTAGAGACA
TCTTATGTAGACAAGTTGACACGCTACAGAAGTACCTTGATGCCTGTGCTGATGCTGTCT
CTAAGATGAACTTCNAAGGATAAAGTGGTAGAAGATGATGAGATGACTTTTCTACAACGC
GTCTGATGGTGACTTCCTGCATAGAC

**3' Read Nucleotide Sequence:**

```
>OriGene 3' read for NM_031361 unedited
GCCGCAATCTANAGTCGAGTTTTTTTTTTTTTTTTTTCTCCACATGGAATGTCACACAG
CCTTGCTTCAGTCACTGTTAATACTAGAACAAAATAGGCTTTCCTGCAGTTTTTTCTTGG
ACGTAAGAAGTAAAACGTTTTAGAAATTTAGGATACTCTCGCTTTGCCACTGCCCTTAAC
ACTGAGGCTGGTGCCCATCCTCCAGGGTTCACATTAGCTACATATGTAATCTTGCATAGA
ATGTTGTCCCTGCTAATTTCCTGGTTTCCCTCTGGTGGGCTTACCAAGGTTTGACAAATC
ATAGCAACATTTATTTTGGCACGGACACATCGGTTGTTTAGAGGAGCACTGTCATGATCC
ACAGAAAAATTACAAACTATCCAAGTTTCAGGGTCATTTTCAGTCAAGGCTGGTATCTTT
CGAATGACAGANAGATATAATACGTCTCGCTGAGAAGCAGGCCACACCCTCTTGTGTGTT
TGATAAATGATGATTGCATTATCAGCTAATGTTTCCACCACATGAAAGTTTTCTATAGTT
GTTTCCCAGTCATTGCGAACGTCAACATTCCAGAAATAATTGCAGACTTCATGTCCTGTG
ACGCCTTTAACTGCATGGGTAGCTTTTTAAGGATCCAGAACAATCCCCATTTCTTCTACT
NCTCTTCTGGATACCTCATTTCTCCCTCTTCTACACCCAACTGCCATTTGGGATCTNCCG
CCTACATCCTGTAATGAGTAAGTCATGTGGTTCTGCACCATCTCTTCTAACTTTTGGACA
AATCTATGGGTCCCCAAGAAAAAAGCATTTCCAGAGGGCAAGGTGTAGGCCATGTAATCT
CCCTTTTACTTGGGACGGTCTTTATTTATCTTGTGGCAGAAACGCTTCAAAGATAAGAAC
TTTTTTTTTATAAACGGTAGGGCTTTTTCTAATCGGCCCTCAAGGGGATTTTCTTAAGCC
GCCTTGAATTNTAAGGCNCCCCGTCTTTTTTTTTCAAGTCCTTACAACTTTTTGCCCTGG
CCACGGTAACCTTATAA
```

**Restriction Sites:** NotI-NotI

**ACCN:** NM_031361

**Insert Size:** 2210 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).

**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_031361.1, NP_112729.1

**RefSeq Size:** 2311 bp

**RefSeq ORF:** 1797 bp

**Locus ID:** 10087

**UniProt ID:** Q9Y5P4

**Cytogenetics:** 5q13.3

**Domains:** PH, START

**Gene Summary:** This gene encodes a kinase that specifically phosphorylates the N-terminal region of the non-collagenous domain of the alpha 3 chain of type IV collagen, known as the Goodpasture antigen. Goodpasture disease is the result of an autoimmune response directed at this antigen. One isoform of this protein is also involved in ceramide intracellular transport. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (2) differs in the 5' UTR and coding region and lacks an alternate in-frame exon compared to variant 3. The resulting isoform (2) is shorter at the N-terminus and lacks an internal segment compared to isoform 3. The absence of the in-frame exon results in the loss of a protein motif and less phosphorylation activity. This isoform also mediates intracellular transport of ceramide from the endoplasmic reticulum to the Golgi apparatus. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.