

Product datasheet for **SC325892**

SERPINE2 (NM_001136530) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SERPINE2 (NM_001136530) Human Untagged Clone
Tag:	Tag Free
Symbol:	SERPINE2
Synonyms:	GDN; GDNPF; PI-7; PI7; PN-1; PN1; PNI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Restriction Sites:	Sgfl-MluI
ACCN:	NM_001136530
Insert Size:	1230 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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).


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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_001136530.1](#)

RefSeq Size: 2186 bp

RefSeq ORF: 1230 bp

Locus ID: 5270

UniProt ID: [P07093](#)

Cytogenetics: 2q36.1

Protein Families: Druggable Genome, Secreted Protein

MW: 45.3 kDa

Gene Summary: This gene encodes a member of the serpin family of proteins, a group of proteins that inhibit serine proteases. Thrombin, urokinase, plasmin and trypsin are among the proteases that this family member can inhibit. This gene is a susceptibility gene for chronic obstructive pulmonary disease and for emphysema. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2012]

Transcript Variant: This variant (4) differs in the 5' UTR and 5' coding region, uses an alternate start codon, and uses an alternate in-frame splice site in the 3' coding region, compared to variant 1. The resulting isoform (c) has a distinct N-terminus and is longer than isoform a.

CCDS Note: This CCDS representation is supported by the mRNA AK295564.1. It contains an alternative 5' exon compared to other variants at this locus, as represented by CCDS2460.1 and CCDS46526.1. It should be noted that the annotated start codon in this CCDS has a weak Kozak signal and is only conserved among primate species. It is possible that leaky scanning by ribosomes could occur to allow a downstream start codon to be used at least some of the time. The downstream start codon has a stronger Kozak signal and is much better conserved, and it would result in a protein that is 12 aa shorter at the N-terminus. There is no experimental evidence indicating which start codon is preferentially used by this variant in vivo. Signal peptides can be predicted for both the longer and shorter N-termini (cleavage following aa 31 or aa 19, respectively), but it should be noted that the probability of signal peptide occurrence is reduced for the longer N-terminus, as predicted by SignalP 3.0 and Phobius. It is unknown if a signal peptide is cleaved from the longer protein in vivo.