

Product datasheet for **SC302498**

Prostate Specific Antigen (KLK3) (NM_001030047) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prostate Specific Antigen (KLK3) (NM_001030047) Human Untagged Clone
Tag:	Tag Free
Symbol:	KLK3
Synonyms:	APS; hK3; KLK2A1; PSA
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001030047, the custom clone sequence may differ by one or more nucleotides ATGTGGGTCCCGTTGTCTTCCTCACCCGTCCGTGACGTGGATTGGTGCTGCACCCCTC ATCCTGTCTCGGATTGTGGGAGGCTGGGAGTGCAGAGAAGCATTCCAACCCTGGCAGGTG CTTGTGGCCTCTCGTGGCAGGGCAGTCTGCGGCGGTGTTCTGGTGCACCCCAAGTGGGTC CTCACAGTGCCTGATCAGGAACAAAAGCGTGATCTTGCTGGTGGTGGCAGCAGCCTG TTTCATCTGAAGACACAGGCCAGGTATTTAGGTGAGCCACAGCTTCCACACCCGCTC TACGATATGAGCCTCCTGAAGAATCGATTCCTCAGGCCAGGTGATGACTCCAGCCAGCAG CTCATGCTGCTCCGCTGTCAGAGCCTGCCGAGCTCACGGATGCTGTGAAGGTCATGGAC CTGCCACCCAGGAGCCAGCACTGGGGACCACCTGCTACGCCTCAGGCTGGGGCAGCATT GAACCAGAGGAGTTCTTGACCCAAAGAACTTCAAGTGTGGACCTCCATGTTATTTCC AATGACGTGTGTGCGCAAGTTCACCCCTCAGAAGGTGACCAAGTTCATGCTGTGTGCTGGA CGCTGGACAGGGGGCAAAGCACCTGCTCGTGGGTGATTCTGATCACCGAACTGACCATG CCAGCCCTGCCGATGGTCTCCATGGCTCCCTAGTGCCCTGGAGAGGAGGTGTCTAG
Restriction Sites:	Please inquire
ACCN:	NM_001030047
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).



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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_001030047.1](#), [NP_001025218.1](#)

RefSeq Size: 1906 bp

RefSeq ORF: 717 bp

Locus ID: 354

UniProt ID: [P07288](#)

Cytogenetics: 19q13.33

Protein Families: Druggable Genome, Protease, Secreted Protein

Protein Pathways: Pathways in cancer, Prostate cancer

Gene Summary: Kallikreins are a subgroup of serine proteases having diverse physiological functions. Growing evidence suggests that many kallikreins are implicated in carcinogenesis and some have potential as novel cancer and other disease biomarkers. The gene is one of the fifteen kallikrein subfamily members located in a cluster on chromosome 19. It encodes a single-chain glycoprotein, a protease which is synthesized in the epithelial cells of the prostate gland, and is present in seminal plasma. It is thought to function normally in the liquefaction of seminal coagulum, presumably by hydrolysis of the high molecular mass seminal vesicle protein. The serum level of this protein, called PSA in the clinical setting, is useful in the diagnosis and monitoring of prostatic carcinoma. Alternate splicing of this gene generates several transcript variants encoding different isoforms. [provided by RefSeq, Dec 2019]
Transcript Variant: This variant (3) uses an alternate splice site at the end of a coding exon, that causes a frameshift. The resulting isoform (3) is shorter and has a distinct C-terminus compared to isoform 1.