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Product datasheet for RC202083

uPA (PLAU) (NM_002658) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	uPA (PLAU) (NM_002658) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	uPA
Synonyms:	ATF; BDPLT5; QPD; u-PA; UPA; URK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC202083 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGAGCCCTGCTGGCGCGCCTGCTTCTCTGCGTCCTGGTCGTGAGCGACTCCAAAGGCAGCAATGAAC
TTCATCAAGTTCCATCGAACTGTGACTGTCTAAATGGAGGAACATGTGTGTCCAACAAGTACTTCTCCAA
CATTCACTGGTGCAACTGCCCAAAGAAATTCGGAGGGCAGCACTGTGAAATAGATAAGTCAAAAACCTGC
TATGAGGGGAATGGTCACTTTTACCGAGGAAAGGCCAGCACTGACACCATGGGCCGGCCCTGCCTGCCCT
GGAACTCTGCCACTGTCCTTCAGCAAACGTACCATGCCCACAGATCTGATGCTCTTCAGCTGGGCCTGGG
GAAACATAATTACTGCAGGAACCCAGACAACCGGAGGCGACCCTGGTGCTATGTGCAGGTGGGCCTAAAG
CCGCTTGTCCAAGAGTGCATGGTGCATGACTGCGCAGATGGAAAAAAGCCCTCCTCTCCTCCAGAAGAAT
TAAAATTTCAGTGTGGCCAAAAGACTCTGAGGCCCCGCTTTAAGATTATTGGGGGAGAATTCACCACCAT
CGAGAACCAGCCCTGGTTTGCGGCCATCTACAGGAGGCACCGGGGGGGCTCTGTCACCTACGTGTGTGGA
GGCAGCCTCATCAGCCCTTGCTGGGTGATCAGCGCCACACACTGCTTCATTGATTACCCAAAGAAGGAGG
ACTACATCGTCTACCTGGGTCGCTCAAGGCTTAACTCCAACACGCAAGGGGAGATGAAGTTTGAGGTGGA
AAACCTCATCCTACACAAGGACTACAGCGCTGACACGCTTGCTCACCACAACGACATTGCCTTGCTGAAG
ATCCGTTCCAAGGAGGGCAGGTGTGCGCAGCCATCCCGGACTATACAGACCATCTGCCTGCCCTCGATGT
ATAACGATCCCCAGTTTGGCACAAGCTGTGAGATCACTGGCTTTGGAAAAGAGAATTCTACCGACTATCT
CTATCCGGAGCAGCTGAAAATGACTGTTGTGAAGCTGATTTCCCACCGGGAGTGTCAGCAGCCCCACTAC
TACGGCTCTGAAGTCACCACCAAAATGCTGTGTGCTGCTGACCCACAGTGGAAAACAGATTCCTGCCAGG
GAGACTCAGGGGGACCCCTCGTCTGTTCCCTCCAAGGCCGCATGACTTTGACTGGAATTGTGAGCTGGGG
CCGTGGATGTGCCCTGAAGGACAAGCCAGGCGTCTACACGAGAGTCTCACACTTCTTACCCTGGATCCGC
AGTCACACCAAGGAAGAGAATGGCCTGGCCCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202083 protein sequence
Red=Cloning site Green=Tags(s)

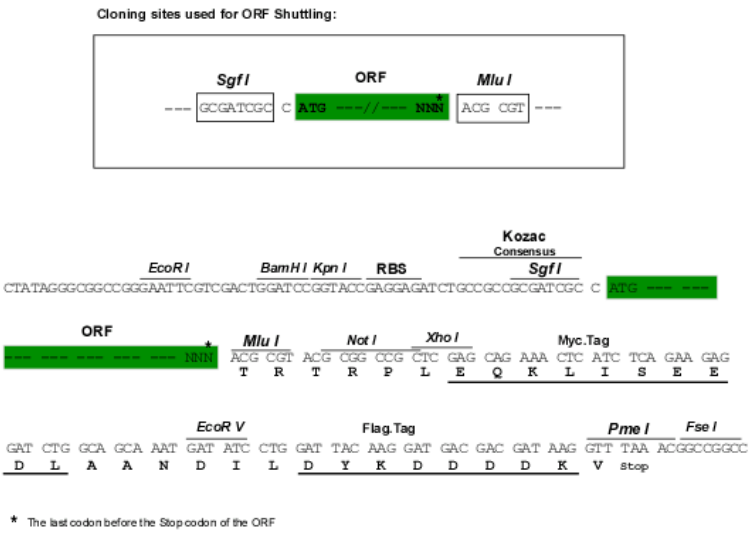
MRALLARLLLCVLVVSDSKGSNELHQVPSNCDCLNGGTCVSNKYFSNIHWCNCPKKFGGQHCEIDKSKTC
YEGNGHFYRGKASTDTMGRPCLPWNSATVLQQTYHAHRSDALQLGLGKHNYCRNPDNRRRPWCYVQVGLK
PLVQECMVHDCADGKKPSSPPEELKFQCGQKTLRPRFKIIGGEFTTIENQPWFAAIYRRHRGGSVTYVCG
GSLISPCWVISATHCFIDYPKKEDYIVYLGRSRLNSNTQGEMKFEVENLILHKDYSADTLAHHNDIALLK
IRSKEGRCAQPSRTIQTICLPSMYNDPQFGTSCEITGFGKENSTDYLYPEQLKMTVVKLISHRECQQPHY
YGSEVTTKMLCAADPQWKTDSCQGDSGGPLVCSLQGRMTLTGIVSWGRGCALKDKPGVYTRVSHFLPWIR
SHTKEENGLAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6147_g03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002658

ORF Size: 1293 bp

OTI Disclaimer: 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.

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

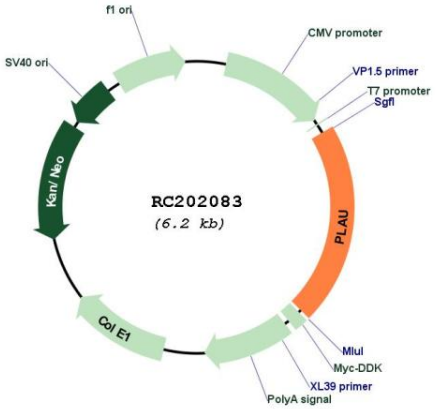
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

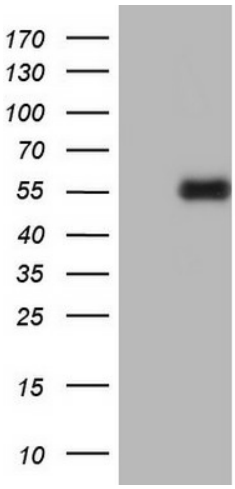
Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid 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.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_002658.5
RefSeq Size:	2395 bp
RefSeq ORF:	1296 bp
Locus ID:	5328
UniProt ID:	P00749
Cytogenetics:	10q22.2
Domains:	KR, Tryp_SPc
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Protease
Protein Pathways:	Complement and coagulation cascades
MW:	48.5 kDa
Gene Summary:	This gene encodes a secreted serine protease that converts plasminogen to plasmin. The encoded preproprotein is proteolytically processed to generate A and B polypeptide chains. These chains associate via a single disulfide bond to form the catalytically inactive high molecular weight urokinase-type plasminogen activator (HMW-uPA). HMW-uPA can be further processed into the catalytically active low molecular weight urokinase-type plasminogen activator (LMW-uPA). This low molecular weight form does not bind to the urokinase-type plasminogen activator receptor. Mutations in this gene may be associated with Quebec platelet disorder and late-onset Alzheimer's disease. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Jan 2016]

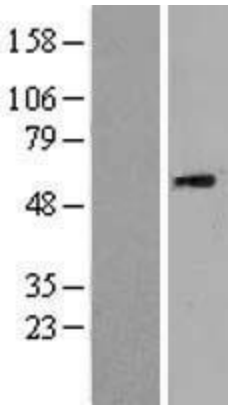
Product images:



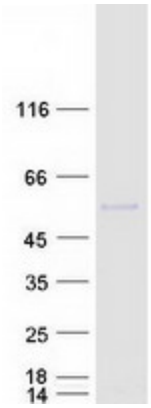
Circular map for RC202083



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PLAU (Cat# RC202083, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PLAU (Cat# [TA805243]). Positive lysates [LY400942] (100ug) and [LC400942] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400942]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202083 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PLAU protein (Cat# [TP302083]). The protein was produced from HEK293T cells transfected with PLAU cDNA clone (Cat# RC202083) using MegaTran 2.0 (Cat# [TT210002]).