

Product datasheet for **RC220940**

PDE7A (NM_002604) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE7A (NM_002604) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PDE7A
Synonyms:	HCP1; PDE7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC220940 representing NM_002604
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAAGTGTGTTACCAGCTGCCGTAAGTCTGCCCTGGACAGGCCGGTCCCCAGCAGCTCCTCAGCCGCC
 GAGGAGCCATCAGCTTCCAGCTCCAGCTCCGCTCTCTTCGGCTGCCCAATCCCCGGCAGCTCTCAGAG
 GCGTGGAGCTATTTCTATGACAGTTCTGATCAGACTGCATTATACATTGATGCTAGGAGATGTACGT
 GTAAGGAGCCGAGCAGGATTTGAATCAGAAAGAAGAGGTTCTCACCCATATATTGATTTTCGATTTTCC
 ACTCTCAATCTGAAATTGAAGTGTCTGTCTCTGCAAGGAATATCAGAAGGCTACTAAGTTCCAGCGATA
 TCTTAGATCTTACGCTTTTTTCGTGGTACTGCGGTTTCAAATCCCTAAACATTTAGATGATGATTAT
 AATGGACAAGCCAAGTGTATGCTGGAAAAAGTTGGAATTTGGAATTTGATATCTTTCTATTTGATAGAC
 TAACAAATGGAATAGTCTAGTAAGCTTAACCTTTCAATTTAGTCTTCATGGATTAATTGAGTACTT
 CCATTTAGATATGATGAACTTCGTAGATTTTTAGTTATGATTCAAGAAGATTACCACAGTCAAAATCCT
 TACCATAACGCAGTCCACGCTGCGGATGTTACTCAGGCCATGCACTGTTACTTAAAGGAACCTAAGCTTG
 CCAATTTCTGTAACCTCCTTGGGATATCTTCTGAGCTTAATTGCAGCTGCCACTCATGATCTGGATCATCC
 AGGTGTTAATCAACCTTTCTTATTAATAAACCATTACTTGGCAACTTATACAAGAATACCTCAGTA
 CTGGAAAAACCACTGGAGATCTGAGTGGGCTTATTGAGAGAAATCAGGCTTATTCTCACATCTGCCAT
 TAGAAAGCAGGCAACAAATGGAGACACAGATAGGTGCTCTGATACTAGCCACAGACATCAGTCGCCAGAA
 TGAGTATCTGTCTTTGTTAGGTCCATTTGGATAGAGGTGATTTATGCCTAGAAGACACCAGACACAGA
 CATTGGTTTTACAGATGGCTTTGAAATGTGCTGATATTTGTAACCCATGTCGGACGTGGGAATTAAGCA
 AGCAGTGGAGTGAAAAAGTAACGGAGGAATCTTCCATCAAGGAGATATAGAAAAAATATCATTGGG
 TGTGAGTCCACTTTCGATCGTCACACTGAATCTATTGCCAACATCCAGATTGGTAACTATACATATTTA
 GATATAGCTGGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC220940 representing NM_002604
 Red=Cloning site Green=Tags(s)

MEVCYQLPVLPLDRPVPQHVLSRRGAISSFSSSSALFGCPNPRQLSQRRAISYDSSDQALYIRMLGDVR
 VRSRAGFESERRGSHPYIDFRIFHSQSEIEVSVSARNIRRLSFQRYLRSSRFRGTAVSNLNLIDDDY
 NGQAKCMLKVGNNWFDIFLFDRLTNGNSLVSLTFHLFSLHGLIEYFHLDMMLRRFLVMIQEDYHSQNP
 YHNAVHAADVTQAMHCYLKEPKLANSVTPWDILLSLIAAATHDLDPGVNQPFLIKTNHYLATLYKNTSV
 LENHHWRSVAVGLLRESGLFSHLPLESRQQMETQIGALILATDISRQNEYLSLFRSHLDRGDLCELDTRHR
 HLVLQMLKCADICNPCTRWELSKQWSEKVTEEFHQGDIEKYLHGVSPLCDRHTESIANIQIGNYTYL
 DIAG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6506_d03.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_002604

ORF Size: 1272 bp

OTI Disclaimer: 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.

RefSeq: [NM_002604.2](#)

RefSeq Size: 2990 bp

RefSeq ORF: 1274 bp

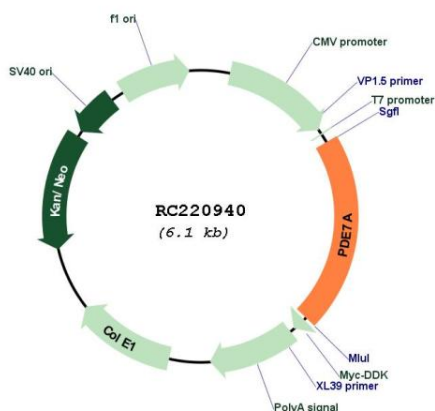
Locus ID: 5150

Cytogenetics: 8q13.1

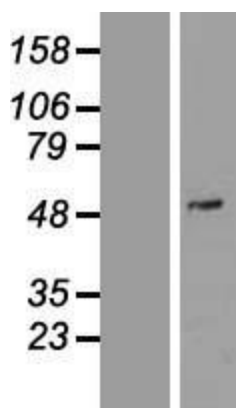
Domains: PDEase, HDc

Protein Families:	Druggable Genome
Protein Pathways:	Progesterone-mediated oocyte maturation, Purine metabolism
MW:	48.6 kDa
Gene Summary:	The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase (PDE) family, and PDE7 subfamily. This PDE hydrolyzes the second messenger, cAMP, which is a regulator and mediator of a number of cellular responses to extracellular signals. Thus, by regulating the cellular concentration of cAMP, this protein plays a key role in many important physiological processes. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2011]

Product images:



Circular map for RC220940



Western blot validation of overexpression lysate (Cat# [LY419222]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220940 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).