OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG220940

PDE7A (NM_002604) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDE7A (NM_002604) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDE7A
Synonyms:	HCP1; PDE7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG220940 representing NM_002604
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAGTGTGTTACCAGCTGCCGGTACTGCCCCTGGACAGGCCGGTCCCCCAGCACGTCCTCAGCCGCC
GAGGAGCCATCAGCTTCAGCTCCAGCTCCGCTCTCTTCGGCTGCCCCAATCCCCGGCAGCTCTCTCAGAG
GCGTGGAGCTATTTCCTATGACAGTTCTGATCAGACTGCATTATACATTCGTATGCTAGGAGATGTACGT
GTAAGGAGCCGAGCAGGATTTGAATCAGAAAGAAGAGGTTCTCACCCATATATTGATTTTCGTATTTTCC
ACTCTCAATCTGAAATTGAAGTGTCTGTCTCTGCAAGGAATATCAGAAGGCTACTAAGTTTCCAGCGATA
TCTTAGATCTTCACGCTTTTTTCGTGGTACTGCGGTTTCAAATTCCCTAAACATTTTAGATGATGATTAT
AATGGACAAGCCAAGTGTATGCTGGAAAAAGTTGGAAATTGGAATTTTGATATCTTTCTATTTGATAGAC
TAACAAATGGAAATAGTCTAGTAAGCTTAACCTTTCATTTATTTAGTCTTCATGGATTAATTGAGTACTT
CCATTTAGATATGATGAAACTTCGTAGATTTTTAGTTATGATTCAAGAAGATTACCACAGTCAAAATCCT
TACCATAACGCAGTCCACGCTGCGGATGTTACTCAGGCCATGCACTGTTACTTAAAGGAACCTAAGCTTG
CCAATTCTGTAACTCCTTGGGATATCTTGCTGAGCTTAATTGCAGCTGCCACTCATGATCTGGATCATCC
AGGTGTTAATCAACCTTTCCTTATTAAAACTAACCATTACTTGGCAACTTTATACAAGAATACCTCAGTA
CTGGAAAATCACCACTGGAGATCTGCAGTGGGCTTATTGAGAGAATCAGGCTTATTCTCACATCTGCCAT
TAGAAAGCAGGCAACAAATGGAGACACAGATAGGTGCTCTGATACTAGCCACAGACATCAGTCGCCAGAA
TGAGTATCTGTCTTTGTTTAGGTCCCATTTGGATAGAGGTGATTTATGCCTAGAAGACACCAGACACAGA
CATTTGGTTTTACAGATGGCTTTGAAATGTGCTGATATTTGTAACCCATGTCGGACGTGGGAATTAAGCA
AGCAGTGGAGTGAAAAAGTAACGGAGGAATTCTTCCATCAAGGAGATATAGAAAAAAAATATCATTTGGG
TGTGAGTCCACTTTGCGATCGTCACACTGAATCTATTGCCAACATCCAGATTGGTAACTATACATATTTA
GATATAGCTGGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

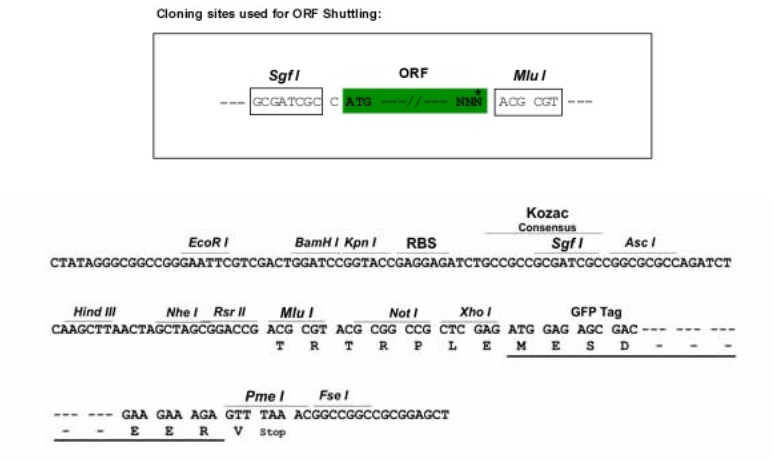
>RG220940 representing NM_002604
Red=Cloning site Green=Tags(s)

MEVCYQLPVLPLDRPVPQHVLSRRGAISFSSSSALFGCPNPRQLSQRRGAISYDSSDQTALYIRMLGDVR
VRSRAGFESERRGSHPYIDFRIFHSQSEIEVSVSARNIRRLLSFQRYLRSSRFFRGTAVSNSLNILDDDY
NGQAKCMLEKVGNWNFDIFLFDRLTNGNSLVSLTFHLFSLHGLIEYFHLDMMKLRRFLVMIQEDYHSQNP
YHNAVHAADVTQAMHCYLKEPKLANSVTPWDILLSLIAAATHDLDHPGVNQPFLIKTNHYLATLYKNTSV
LENHHWRSAVGLLRESGLFSHLPLESRQQMETQIGALILATDISRQNEYLSLFRSHLDRGDLCLEDTRHR
HLVLQMALKCADICNPCRTWELSKQWSEKVTEEFFHQGDIEKKYHLGVSPLCDRHTESIANIQIGNYTYL
DIAG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

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

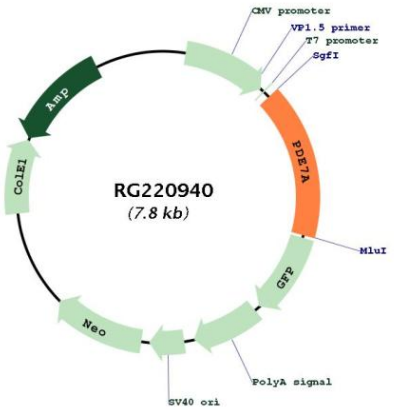
Domains: PDEase, HDc

Protein Families: Druggable Genome

Protein Pathways: Progesterone-mediated oocyte maturation, Purine metabolism

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 RG220940