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Product datasheet for RC230843

PRODH (NM_001195226) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PRODH (NM_001195226) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PRODH
Synonyms:	HSPOX2; PIG6; POX; PRODH1; PRODH2; TP53I6
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

View online »

ORF Nucleotide Sequence:

>RC230843 representing NM_001195226
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAAGATGACCTTCTATGGGCATTTTGTAGCCGGGGAGGACCAGGAGTCCATCCAGCCCCTGCTTCGGC
ACTACAGGGCCTTCGGTGTCAGCGCCATCCTGGACTATGGAGTGGAGGAGGACCTGAGCCCCGAGGAGGC
AGAGCACAAGGAGATGGAGTCCTGCACCTCAGCTGCGGAGAGGGATGGCAGTGGCACGAATAAGCGGGAC
AAGCAATACCAGGCCCACCGGGCCTTCGGGGACCGCAGGAATGGTGTCATCAGTGCCCGCACCTACTTCT
ACGCCAATGAGGCCAAGTGCGACAGCCACATGGAGACATTCTTGCGCTGCATCGAAGCCTCAGGTAGAGT
CAGCGATGACGGCTTCATAGCCATTAAGCTCACAGCACTGGGGAGACCCCAGTTTCTGCTGCAGTTCTCA
GAGGTGCTGGCCAAGTGGAGGTGCTTCTTTCACCAAATGGCTGTGGAGCAAGGGCAGGCGGGCCTGGCTG
CCATGGACACCAAGCTGGAGGTGGCGGTGCTGCAGGAAAGTGTCGCAAAGTTGGGCATCGCATCCAGGGC
TGAGATTGAGGACTGGTTCACGGCAGAGACCCTGGGAGTGTCTGGCACCATGGACCTGCTGGACTGGAGC
AGCCTCATCGACAGCAGGACCAAGCTGTCCAAGCACCTGGTAGTCCCCAACGCACAGACAGGACAGCTGG
AGCCCCTGCTGTCCCGGTTCACTGAGGAGGAGGAGCTACAGATGACCAGGATGCTACAGCGGATGGATGT
CCTGGCCAAGAAAGCCACAGAGATGGGCGTGCGGCTGATGGTGGATGCCGAGCAGACCTACTTCCAGCCG
GCCATCAGCCGCCTGACGCTGGAGATGCAGCGGAAGTTCAATGTGGAGAAGCCGCTCATCTTCAACACAT
ACCAGTGCTACCTCAAGGATGCCTATGACAATGTGACCCTGGACGTGGAGCTGGCTCGCCGTGAGGGCTG
GTGTTTTGGGGCCAAGCTGGTGCGGGGCGCATACCTGGCCCAGGAGCGAGCCCGTGCGGCAGAGATCGGC
TATGAGGACCCCATCAACCCCACGTACGAGGCCACCAACGCCATGTACCACAGGTGCCTGGACTACGTGT
TGGAGGAGCTGAAGCACAACGCCAAGGCCAAGGTGATGGTGGCCTCCCACAATGAGGACACAGTGCGCTT
TGCACTGCGCAGGATGGAGGAGCTGGGCCTGCATCCTGCTGACCACCGGGTGTACTTTGGACAGCTGCTA
GGCATGTGTGACCAGATCAGCTTCCCGCTGGGCCAGGCTGGCTACCCCGTGTACAAGTACGTGCCCTATG
GCCCCGTGATGGAGGTGCTGCCCTACTTGTCCCGCCGTGCCCTGGAGAACAGCAGCCTCATGAAGGGCAC
CCATCGGGAGCGGCAGCTGCTGTGGCTGGAGCTCTTGAGGCGGCTCCGAACTGGCAACCTCTTCCATCGC
CCTGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

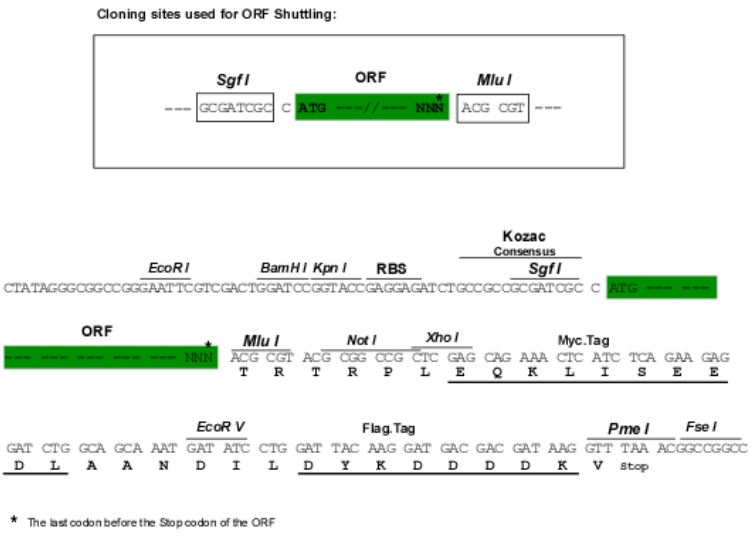
>RC230843 representing NM_001195226
Red=Cloning site Green=Tags(s)

MKMTFYGHFVAGEDQESIQPLLRHYRAFGVSAILDYGVEEDLSPEEAEHKEMESCTSAAERDGSGTNKRD
KQYQAHRAFGDRRNGVISARTYFYANEAKCDSHMETFLRCIEASGRVSDDGFIAIKLTALGRPQFLLQFS
EVLAKWRCFFHQMAVEQGQAGLAAMDTKLEVAVLQESVAKLGIASRAEIEDWFTAETLGVSGTMDLLDWS
SLIDSRTKLSKHLVVPNAQTGQLEPLLSRFTEEEELQMTRMLQRMDVLAKKATEMGVRLMVDAEQTYFQP
AISRLTLEMQRKFNVEKPLIFNTYQCYLKDAYDNVTLDVELARREGWCFGAKLVRGAYLAQERARAAEIG
YEDPINPTYEATNAMYHRCLDYVLEELKHNAKAKVMVASHNEDTVRFALRRMEELGLHPADHRVYFGQLL
GMCDQISFPLGQAGYPVYKYVPYGPVMEVLPYLSRRALENSSLMKGTHRERQLLWLELLRRLRTGNLFHR
PA

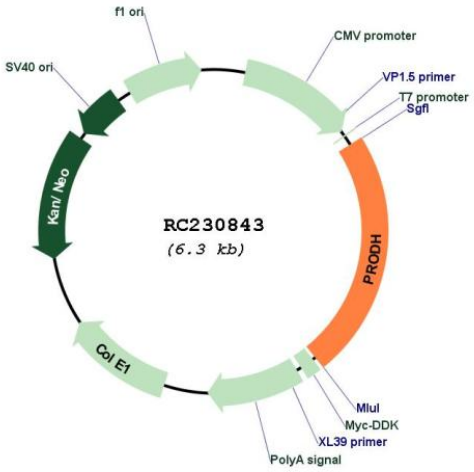
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001195226
ORF Size:	1476 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_001195226.1, NP_001182155.1
RefSeq ORF:	1479 bp
Locus ID:	5625
UniProt ID:	O43272
Cytogenetics:	22q11.21
Protein Families:	Druggable Genome
Protein Pathways:	Arginine and proline metabolism, Metabolic pathways
MW:	56.6 kDa
Gene Summary:	This gene encodes a mitochondrial protein that catalyzes the first step in proline degradation. Mutations in this gene are associated with hyperprolinemia type 1 and susceptibility to schizophrenia 4 (SCZD4). This gene is located on chromosome 22q11.21, a region which has also been associated with the contiguous gene deletion syndromes, DiGeorge and CATCH22. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2010]