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Product datasheet for RC214289

CYP2A13 (NM_000766) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP2A13 (NM_000766) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYP2A13
Synonyms:	CPAD; CYP2A; CYPIIA13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC214289 representing NM_000766
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGGCCTCAGGGCTGCTTCTGGTGACCTTGCTGGCCTGCCTGACTGTGATGGTCTTGATGTCAGTCT
GGCGGCAGAGGAAGAGCAGGGGGAAGCTGCCTCCGGGACCCACCCCATTGCCCTTCATTGGAAACTACCT
GCAGCTGAACACAGAGCAGATGTACAACTCCCTCATGAAGATCAGTGAGCGCTATGGCCCTGTGTTCACC
ATTCACTTGGGGCCCCGGCGGGTCGTGGTGCTGTGCGGACATGATGCCGTCAAGGAGGCTCTGGTGGACC
AGGCTGAGGAGTTCAGCGGGCGAGGCGAGCAGGCCACCTTCGACTGGCTCTTCAAAGGCTATGGCGTGGC
GTTCAGCAACGGGGAGCGCGCCAAGCAGCTCCGGCGCTTCTCCATCGCCACCCTAAGGGGTTTTGGCGTG
GGCAAGCGCGGCATCGAGGAACGCATCCAGGAGGAGGCGGGCTTCCTCATCGACGCCCTCCGGGGCACGC
ACGGCGCCAATATCGATCCCACCTTCTTCCTGAGCCGCACAGTCTCCAATGTCATCAGCTCCATTGTCTT
TGGGGACCGCTTTGACTATGAGGACAAAGAGTTCCTGTCACTGTTGCGCATGATGCTGGGAAGCTTCCAG
TTCACGGCAACCTCCACGGGGCAGCTCTATGAGATGTTCTCTTCGGTGATGAAACACCTGCCAGGACCAC
AGCAACAGGCCTTTAAGGAGCTGCAAGGGCTGGAGGACTTCATCGCCAAGAAGGTGGAGCACAACCAGCG
CACGCTGGATCCCAATTCCCCACGGGACTTCATCGACTCCTTTCTCATCCGCATGCAGGAGGAGGAGAAG
AACCCCAACACAGAGTTCTACTTGAAGAACCTGGTGATGACCACCCTGAACCTCTTCTTTGCGGGCACTG
AGACCGTGAGCACCACCCTGCGCTACGGTTTCCTGCTGCTCATGAAGCACCCAGAGGTGGAGGCCAAGGT
CCATGAGGAGATTGACAGAGTGATCGGCAAGAACCGGCAGCCCAAGTTTGAGGACCGGGCCAAGATGCCC
TACACAGAGGCAGTGATCCACGAGATCCAAAGATTTGGAGACATGCTCCCCATGGGTTTGGCCCACAGGG
TCAACAAGGACACCAAGTTTCGGGATTTCTTCCTCCCTAAGGGCACTGAAGTGTTCCCTATGCTGGGCTC
CGTGCTGAGAGACCCCAGGTTCTTCTCCAACCCCCGGGACTTCAATCCCCAGCACTTCCTGGATAAGAAG
GGGCAGTTTAAGAAGAGTGATGCTTTTGTGCCCTTTTCCATCGGAAAGCGGTACTGTTTTGGAGAAGGCC
TGGCCAGAATGGAGCTCTTTCTCTTCTTCACCACCATCATGCAGAACTTTCGCTTCAAGTCCCCTCAGTC
GCCTAAGGATATCGACGTGTCCCCCAAACACGTGGGCTTTGCCACGATCCCACGAAACTACACCATGAGC
TTCCTGCCCCGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC214289 representing NM_000766
Red=Cloning site Green=Tags(s)

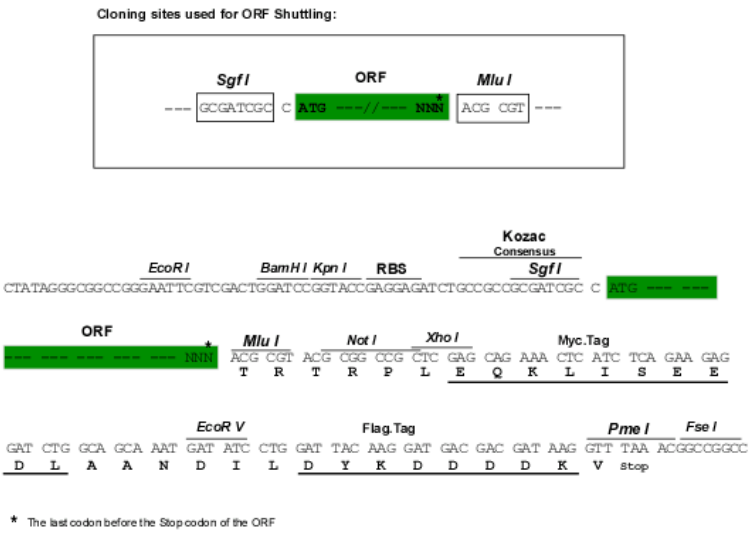
MLASGLLLVTLLACLTVMVLMSVWRQRKSRGKLPPGPTPLPFIGNYLQLNTEQMYNSLMKISERYGPVFT
IHLGPRRVVVLCGHDAVKEALVDQAEEFSGRGEQATFDWLFKGYGVAFSNGERAKQLRRFSIATLRGFGV
GKRGIEERIQEEAGFLIDALRGTHGANIDPTFFLSRTVSNVISSIVFGDRFDYEDKEFLSLLRMMLGSFQ
FTATSTGQLYEMFSSVMKHLPGPQQQAFKELQGLEDFIAKKVEHNQRTLDPNSPRDFIDSFLIRMQEEEK
NPNTEFYLKNLVMTTLNLFFAGTETVSTTLRYGFLLLMKHPEVEAKVHEEIDRVIGKNRQPKFEDRAKMP
YTEAVIHEIQRFGDMLPMGLAHRVNKDTKFRDFFLPKGTEVFPMLGSVLRDPRFFSNPRDFNPQHFLDKK
GQFKKSDAFVPFSIGKRYCFGEGLARMELFLFFTTIMQNFRFKSPQSPKDIDVSPKHVGFATIPRNYTMS
FLPR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6788_b09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000766

ORF Size: 1482 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_000766.5

RefSeq Size: 1747 bp

RefSeq ORF: 1485 bp

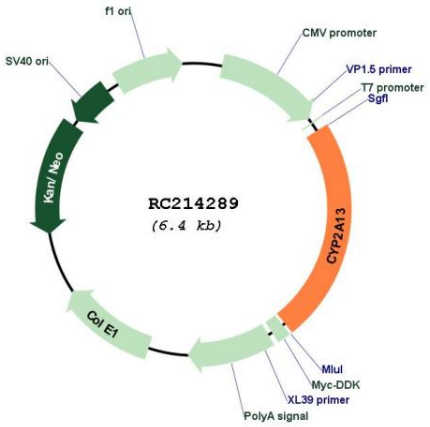
Locus ID: 1553

UniProt ID: Q16696

Cytogenetics: 19q13.2

Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Caffeine metabolism, Drug metabolism - cytochrome P450, Drug metabolism - other enzymes, Metabolic pathways, Retinol metabolism
MW:	56.5 kDa
Gene Summary:	This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum. Although its endogenous substrate has not been determined, it is known to metabolize 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone, a major nitrosamine specific to tobacco. This gene is part of a large cluster of cytochrome P450 genes from the CYP2A, CYP2B and CYP2F subfamilies on chromosome 19q. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC214289