

Product datasheet for **RR214992**

Npy (NM_012614) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Npy (NM_012614) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Npy
Synonyms: NPY02; RATNPY; RATNPY02
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR214992 representing NM_012614
Red=Cloning site **Blue**=ORF **Green**=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGATGCTAGGTAACAAACGAATGGGGCTGTGTGGACTGACCCTCGCTCTATCCCTGCTCGTGTGTTGG
GCATTCTGGCTGAGGGGTACCCCTCCAAGCCGGACAATCCGGGCGAGGACGCGCCAGCAGAGGACATGCC
CAGATACTACTCCGCTCTGCGACTACATCAATCTCATCACCAGACAGAGATATGGCAAGAGATCCAGC
CCTGAGACTGATTTTCAGATCTCTTAATGAGAGAAAGCACAGAAAATGCCCCAGAACAAAGGCTTGAAG
ACCTTCCATGTGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR214992 representing NM_012614
Red=Cloning site **Green**=Tags(s)

MMLGNKRMGLCGLTLALSLLVCLGILAEGYPSKPDNPGEDAPAEDMARYYSALRHYYINLITRQRYGKRSS
PETLISDLLMRESTENAPRTRLEDPSMW

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

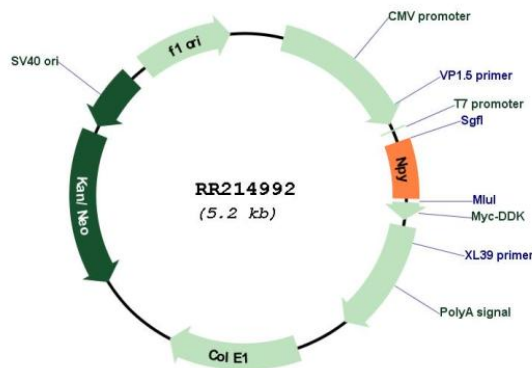


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Cloning Scheme:



Plasmid Map:



ACCN: NM_012614

ORF Size: 294 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:	<ol style="list-style-type: none">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_012614.2 , NP_036746.1
RefSeq Size:	567 bp
RefSeq ORF:	297 bp
Locus ID:	24604
UniProt ID:	P07808
Cytogenetics:	4q24
MW:	11 kDa
Gene Summary:	This gene encodes a neuropeptide that is widely expressed in the central nervous system and influences many physiological processes, including cortical excitability, stress response, food intake, circadian rhythms, and cardiovascular function. Studies in the rat model of depression (Flinders Sensitive Line) show that this gene is downregulated in the hippocampus and the prefrontal cortex compared to the control (Flinders Resistant Line). Alternatively spliced transcript variants of this gene have been described, but the function of all the variants is not known. [provided by RefSeq, Jul 2012]