

Product datasheet for **MR202704**

Nat8 (NM_023455) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nat8 (NM_023455) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nat8
Synonyms:	0610037O16Rik; CCNAT; Cml4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202704 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTTCTTTTCGCATCCGCCAGTTCCAGGAGAGGGACTACAAACAGGTCGTGGATGTGTTCTCCAGGG
GCATGGAGGAGCACATACCCACTGCCTTCCGCCACTTGCTGACACTGCCCCGAACCCTCCTGCTCTTAGC
TGTGGTGCCCTTGCCATAGTCTGGTGTCTGGCTCCTGGTTCCTGGCTGTTGTATGCATTTTCTTTCTG
TTCCTATTCTTGTGGTTCCTCGCCAGCAAGCCCTGGAAGAATTATGTGTCAAATGTTTACACACAGACA
TGGCTGACATACCAAGTCTACCTGAGTGTCCGTGGCTCAGGTTTCTGGGTGGCTGAGTCTGGGGGCA
GGTGGTGGGTACAGTGGCTGCTCGGCCAGTCAAGGATCCTCCGTTAGGGAGGAAGCAGCTGCAGCTCTT
CGCCTGTCTGTCTCCTCAGCATCGAGGACAGGGGATAGCGAAAGCGCTGACCAGAACTGTCCTCCAGT
TTGCAAGGGACCAGGGTTACAGTGATGTTGCTTGTGACTGGCCTTTTGCAGCAAGGTGCTGTGACTCT
CTACTACAGCATGGGCTTCCAGAAGACAGGTGAATCCTTCGTGGACATACTCACATGGCTTGTGGATGTT
TCTCTAATTCATTTCATATACCCACTCCCTTCTGCTCAAAATATGAGTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >MR202704 protein sequence
 Red=Cloning site Green=Tags(s)

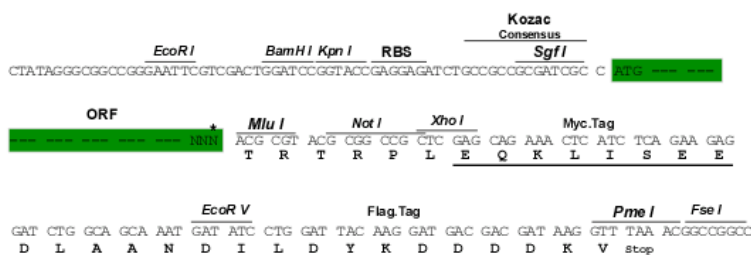
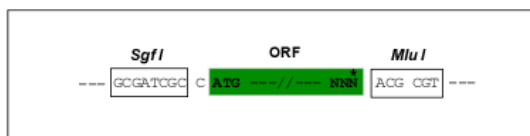
MASFRIRQFQERDYKQVVDVFSRGMEEHPTAFRHLLTLPRTLALLAVVPLAIVLVSGSWFLAVVCIFFL
 FLFLWFLASKPWKNYVSKCLHTDMADITKSYLSVRGSGFWVAESGGQVVGTVAAARPVKDPLGRKQLQLF
 RLSVSSQHRGQGIKALTRTVLQFARDQGYSDVVLVTGLLQQGAVTLYYSMGFKQTGESFVDILTWLVDV
 SLIHFIYPLPSAOKYEL

TRTRPLEOKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM 023455

ORF Size: 681 bp

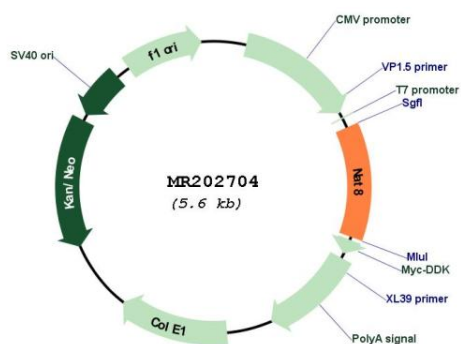
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_023455.4</u>
RefSeq Size:	941 bp
RefSeq ORF:	684 bp
Locus ID:	68396
UniProt ID:	<u>Q9JIY7</u>
Cytogenetics:	6 C3
MW:	25.6 kDa
Gene Summary:	<p>Acetylates the free alpha-amino group of cysteine S-conjugates to form mercapturic acids. This is the final step in a major route for detoxification of a wide variety of reactive electrophiles which starts with their incorporation into glutathione S-conjugates. The glutathione S-conjugates are then further processed into cysteine S-conjugates and finally mercapturic acids which are water soluble and can be readily excreted in urine or bile. Alternatively, may have a lysine N-acetyltransferase activity catalyzing peptidyl-lysine N6-acetylation of various proteins. Thereby, may regulate apoptosis through the acetylation and the regulation of the expression of PROM1. May also regulate amyloid beta-peptide secretion through acetylation of BACE1 and the regulation of its expression in neurons (By similarity). [UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR202704