

Product datasheet for **SC208720**

GcnIII (GCNI) (NM_006836) Human 3' UTR Clone

Product data:

Product Type:	3' UTR Clones
Symbol:	GcnIII
Synonyms:	GCNII; GCNII; PRIC295
Mammalian Cell	Neomycin
Selection:	
Vector:	pMirTarget (PSI00062)
ACCN:	NM_006836
Insert Size:	677 bp

Insert Sequence: >SC208720 3'UTR clone of NM_006836
The sequence shown below is from the reference sequence of NM_006836. The complete sequence of this clone may contain minor differences, such as SNPs.
Blue=Stop Codon Red=Cloning site

```
GGCAAGTTGGACGCCCGCAAGATCCGCGAGATTCTCATTAAAGCCAAGAAGGGCGGAAAGATCGCCGTG
TAACAATTGGCAGAGCTCAGAATTCAGCGATCGCC
GAGCAGGTGGACGACACCATCCTGACATGAGAGGCTGGGCCAGCAGCAGCATTGCCGCTCCACATCTT
TGCTCAATGTTTTTCAATTTTGAATAACATTTGTTCCAATGGGGAGCTTGAAGATGGCGTTCCAGAA
AGTATTTTAAATATCAATAGACCACAGCCAAAGCCTTAAATCAAACCCACACACAAGTAAAAATTGCCTC
CTCCATCTCTCACCTTTTCTGTGGAGAAGAGAAGGAAAAGCACACGCATGCGCCTCAGCAAATGGCAG
CCCAGGAGCTGTTTGTCCAGTTTAGCATGGCTAGGTCTGGAATAATAGCAGGTCAGACTGTGGGT
TCCTCTTCTCCTGTGCTTGAGCTCTGGTTGAGAGCTGGCGCTACCAACCTTTTCTATATCCCGAGT
GGGGCACAGACGGTGGATCTCTGCCAGTGTGGTGTCTGGCTTTTCAATATTGTGAGGTCTG
AATGGATCTGACCCCTGTGAGATGAAAATGATTACAGCTCTGGCAGTTCCCAAGTCTGGGGAGGGTA
TAGGTTTGAAGGCTGTTTGAAGAGGAATGTTAATAAAGGCTTTGATTAACTTGTATATAAACAGA
TTTTTAAAAATCTCCACCATTAACATGAAGCTTCTGCATCAGGAATAAGGAAA
ACGCGTAAGCGGCCGCGCATCTAGATTGGAAGAAAATGACCGACCAAGCGACGCCAACCTGCCATCA
CGAGATTTTCGATTCCACCGCCGCTTCTATGAAAGG
```

Restriction Sites: SgfI-MluI

OTI Disclaimer: Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences, e.g., single nucleotide polymorphisms (SNPs).



Components:	The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_006836.2</u>
Summary:	Acts as a positive activator of the EIF2AK4/GCN2 protein kinase activity in response to amino acid starvation. Forms a complex with EIF2AK4/GCN2 on translating ribosomes; during this process, GCN1 seems to act as a chaperone to facilitate delivery of uncharged tRNAs that enter the A site of ribosomes to the tRNA-binding domain of EIF2AK4/GCN2, and hence stimulating EIF2AK4/GCN2 kinase activity. Participates in the repression of global protein synthesis and in gene-specific mRNA translation activation, such as the transcriptional activator ATF4, by promoting the EIF2AK4/GCN2-mediated phosphorylation of eukaryotic translation initiation factor 2 (eIF-2-alpha/eIF2S1) on 'Ser-52', and hence allowing ATF4-mediated reprogramming of amino acid biosynthetic gene expression to alleviate nutrient depletion.[UniProtKB/Swiss-Prot Function]
Locus ID:	10985
MW:	25.6