

Product datasheet for **SC116655**

NGAL (LCN2) (NM_005564) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NGAL (LCN2) (NM_005564) Human Untagged Clone
Tag:	Tag Free
Symbol:	NGAL
Synonyms:	24p3; MSFI; NGAL; p25
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC116655 sequence for NM_005564 edited (data generated by NextGen Sequencing)

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ATGCCCCCTAGGTCTCCTGTGGCTGGGCCTAGCCCTGTTGGGGCTCTGCATGCCAGGCC  
CAGGACTCCACCTCAGACCTGATCCCAGCCCCACCTCTGAGCAAGTCCCTCTGCAGCAG  
AACTTCCAGGACAACCAATTCCAGGGGAAGTGGTATGTGGTAGGCCTGGCAGGGAATGCA  
ATTCTCAGAGAAGACAAAGACCCGCAAAAGATGTATGCCACCATCTATGAGCTGAAAGAA  
GACAAGAGCTACAATGTCACCTCCGTCCTGTTTAGGAAAAAGAAGTGTGACTACTGGATC  
AGGACTTTTGTCCAGGTTGCCAGCCCGGCGAGTTCACGCTGGGCAACATTAAGAGTTAC  
CCTGGATTAACGAGTTACCTCGTCCGAGTGGTGAGCACCAACTACAACCAGCATGCTATG  
GTGTTCTTCAAGAAAGTTTCTCAAACAGGGAGTACTTCAAGATCACCTCTACGGGAGA  
ACCAAGGAGCTGACTTCGGAACAAAGGAGAACTTCATCCGCTTCTCAAATCTCTGGGC  
CTCCCTGAAAACCATCGTCTTCCCTGTCCAATCGACCAGTGTATCGACGGCTGA
```

Clone variation with respect to NM_005564.3



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_005564 unedited
 NGGGTCAGAAATTTGTATACGACTCCTATAGGGCGGCCGGAATCGGCACCAGCTCTTCCA
 CCCCTGCCAGGCCAGCAGCCACACAGCGCCTGCTTCTCGGCCCTGAAATCATGCCCC
 TAGGTCTCCTGTGGCTGGGCCTAGCCCTGTTGGGGCTCTGCATGCCAGGCCAGGACT
 CCACCTCAGACCTGATCCCAGCCCCACCTCTGAGCAAGTCCCTCTGCAGCAGAACTTCC
 AGGACAACCAATCCAGGGGAAGTGGTATGTGGTAGGCCTGGCAGGGAATGCAATTCTCA
 GAGAAGACAAAGACCCCGCAAAGATGTATGCCACCATCTATGAGCTGAAAGAAGACAAGA
 GCTACAATGTCACTCCGTCCTGTTTAGGAAAAAGAGTGTGACTACTGGATCAGGACTT
 TTGTTCCAGGTTGCCAGCCCGGCGAGTTCACGCTGGGCAACATTAAAGAGTTACCTGGAT
 TAACGAGTTACCTCGTCCGAGTGGTGGACCAACTACAACCAGCATGCTATGGTGTCT
 TCAAGAAAGTTTCTAAAAACAGGGAGTACTTCAAGATCACCTCTACGGGAGAACCAAGG
 AGCTGACTTCGGAATAAAGGAGAACTTCATCCGCTTCTCCAAATCTCTGGGCTCCCTG
 AAAACCACATCGTCTTCCCTGTCCCAATCGACCAGTGTATCGACGGCTGAGTGCACAGGT
 GCCGCCAGCTGCCGACCAGCCGAACACCATTGAGGGAGCTGGGAGACCCTCCCCAGT
 GCCACCATGCAGCTGCTCCCAGCCACCCCGCTGATGGAGCCCCACCTTGTCTGTNAAT
 AACATGTGCCCTCAGANAAAAAAAAAAAAAAGTCTGACTCTAGATTGCGCCGCCGTCATAG
 CTGTTTCTGACAGATCCGNTGCATCCTGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_005564 unedited
 CTATGACACGCGGCACGCAATCTAGAGATCGAGTTTTTTTTTTTTTTTTTTCTGAGGGCA
 CATGTTTATTTAGCAGACAAGGTGGGGCTCCATCAGCGGGGTGGCCTGGGGAGCAGCTGC
 ATGGGTGGCACTGTGGGAGGGTCTCCAGCTCCCTCAATGGTGTTCGGGCTGGTGGCGG
 AGCTGGCGGCACCTGTGCACTCAGCCGTGATACACTGGTCGATTGGGACAGGGAAGACG
 ATGTGGTTTTAGGGAGGCCAGAGATTTGGAGAAGCGGATGAAGTTCTCCTTTAGTTCC
 GAAGTCAGCTCCTTGGTTCTCCCGTAGAGGGTGTCTTGAAGTACTCCCTGTTTTGAGAA
 ACTTTCTTGAAGAACCCATAGCATGCTGGTGTAGTTGGTGCTCACCCTCGGACGAGG
 TAACCTGTTAATCCAGGGTAACCTTAAATGTTGCCAGCGTGAACCTCGCCGGGCTGGCAA
 CCTGNAACAAAAGTCTGATCCAGTANTCACACTTTTTTTTTCTAACAGGACGGAGGTG
 ACATTGAAGCTCTTGTCTTCTTCAACCCATANATGGTGGCATAACATCTTTGCGGGTCT
 TTGTCTCTTTGAGAATTGAATTTCTTGCAGCCTACCACATCCACTTCCCCTGAAATTG
 GTTGCTCTGGTAATTTTTGCTGCAAAAGGCCTTTGTCTCAAAGAGGGTCTAGGTAACCA
 CCCAAGGTAGAACCCTTGGTTTTGGTATGCTAAATATTCAATAGTTTTTTCTTTTTTTTC
 TCGACCACTCAGCACTTTGATCTAANNNNCCCGCAACTTCTCATTTTCNAGATTTTTTC
 TCCATTTTATCCCTTCTATCTTGCGCCACCTTGTCTTCTCGTTATCTGTACGCCCTC
 CCTTTTTTTTTTTTATTCTCCCTCCTTTTTTATAACACAGCACACTCATATCTATC
 CCCATACCTCCATCA

Restriction Sites:

NotI-NotI

ACCN:

NM_005564

Insert Size:

850 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_005564.2](#), [NP_005555.2](#)

RefSeq Size: 845 bp

RefSeq ORF: 597 bp

Locus ID: 3934

UniProt ID: [P80188](#)

Cytogenetics: 9q34.11

Domains: lipocalin

Protein Families: Secreted Protein

Gene Summary: This gene encodes a protein that belongs to the lipocalin family. Members of this family transport small hydrophobic molecules such as lipids, steroid hormones and retinoids. The protein encoded by this gene is a neutrophil gelatinase-associated lipocalin and plays a role in innate immunity by limiting bacterial growth as a result of sequestering iron-containing siderophores. The presence of this protein in blood and urine is an early biomarker of acute kidney injury. This protein is thought to be involved in multiple cellular processes, including maintenance of skin homeostasis, and suppression of invasiveness and metastasis. Mice lacking this gene are more susceptible to bacterial infection than wild type mice. [provided by RefSeq, Sep 2015]