

Product datasheet for **SC118550**

FURIN (NM_002569) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FURIN (NM_002569) Human Untagged Clone
Tag:	Tag Free
Symbol:	FURIN
Synonyms:	FUR; PACE; PCSK3; SPC1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC118550 sequence for NM_002569 edited (data generated by NextGen Sequencing)

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ATGGAGCTGAGGCCCTGGTTGCTATGGGTGGTAGCAGCAACAGGAACCTTGGTCCTGCTA
GCAGCTGATGCTCAGGGCCAGAAGGTCTTACCAACACGTGGGCTGTGCGCATCCCTGGA
GGCCACGGTGGCCAACAGTGTGGCACGAAGCATGGGTTCTCAACCTGGGCCAGATC
TTCGGGGACTATTACCCTTCTGGCATCGAGGAGTGACGAAGCGGTCCCTGTGCGCTCAC
CGCCCGGGCACAGCCGGCTGCAGAGGGAGCCTCAATGGCTGGAACAGCAGGTGGCAAAG
CGACGGACTAAACGGGACGTGTACCAGGAGCCACAGACCCCAAGTTTCTCAGCAGTGG
TACCTGTCTGGTGTCACTCAGCGGGACCTGAATGTGAAGGCGGCCTGGGCGCAGGGCTAC
ACAGGGCACGGCATTGTGGTCTCCATTCTGGACGATGGCATCGAGAAGAACCACCCGGAC
TTGGCAGGCAATTATGATCCTGGGGCCAGTTTTGATGTCAATGACCAGGACCCTGACCCC
CAGCCTCGGTACACACAGATGAATGACAACAGGCACGGCACACGGTGTGCGGGGGAAGTG
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TCTCACACGGGCACCTCAGCCTCTGCCCCCTTAGCAGCCGGCATCATTGCTCTCACCCCTG
GAGGCCAATAAGAACCTCACATGGCGGGACATGCAACACCTGGTGGTACAGACCTCGAAG
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TCATATGGCTACGGGCTTTTGGACGCAGGCGCCATGGTGGCCCTGGCCCAAGATTGGACC
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CGGCTGCGGGCAGGGCTGCTGCCCTCACACCTGCCTGAGGTGGTGGCCGGCCTCAGCTGC
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AGTTTTCGGGGGTGAAGGTGTACACCATGGACCGTGGCCTCATCTCTACAAGGGGCTG
CCCCCTGAAGCCTGGCAGGAGGAGTGCCCGTCTGACTCAGAAGAGGACGAGGGCCGGGG
GAGAGGACCGCCTTATCAAAGACCAGAGCGCCCTCTGA
    
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Clone variation with respect to NM_002569.2
 277 g=>-;278 t=>-;279 a=>-;280 c=>-;281 a=>-;282 g=>-;1851 g=>c

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002569 unedited
 CCCC GCCCGTTGCCGCAAAGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGA
 GCTCATTTAGGTGACACTATAGAATACAAGCTACTTGTCTTTTTGCAGCGGCCGCGAAT
 TCGGCACGAGGCCAAGGAGACGGGCGCTCCAGGGTCCCAGCCACCTGTCCCCCATGGA
 GCTGAGGCCCTGGTTGCTATGGGTGGTAGCAGCAACAGGAACCTTGGTCCTGCTAGCAGC
 TGATGCTCAGGGCCAGAAGGTCTTCACCAACACGTGGGCTGTGCGCATCCCTGGAGGCC
 AGCGGTGGCCAACAGTGTGGCACGGAAGCATGGGTTCTCAACCTGGGCCAGATCTTCGG
 GGACTATTACCATTCTGGCATCGAGGAGTGACGAAGCGGTCCCTGTGCGCTCACCGCCC
 GCGGCACAGCCGGCTGCAGAGGGAGCCTCAATGGCTGGAACAGCAGGTGGCAAAGCGACG
 GACTAAACGGGACGTGTACCAGGAGCCACAGACCCCAAGTTTCTCAGCAGTGGTACCT
 GTCTGGTGTCACTCAGCGGGACCTGAATGTGAAGGCGGCTGGGCGCAGGGCTACACAGG
 GCACGGCATTGTGGTCTCCATTCTGGACGATGGCATCGAGAAGAACCACCCGGACTTGGC
 AGGCAATTATGATCCTGGGGCAGTTTTGATGTCAATGACCAGGACCCTGACCCCGACC
 TCGGTACACACAGATGAATGACAACAGGCACGGCACACGGTGTGCGGNGGAAGTGGCTGC
 GGTGGCCAAACAACTGTCTGTGGTGTANGGTGTGGCCCTACACGCCCGATTGGAGGGG
 TCGCATGCTGGATGGCAGGTGACAGATGCAGTGGAGGCACGCTCGCTGGCCCTGAACC
 CCAACCCATNCCATCTACGTGCCAGCTGGNGCCCGAGGATGACGCAGACATNGATGGGCC
 ACCCGCTCGCGAGGAGCCTCTCCGTGG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002569 unedited
 GGTGGTTCAGCCCGATCATGGGTTTAAAAAAACCCATTATCTCATGTCCATTAATTT
 AACCAGCAATGCTGGGCCTGTTTAAATTACAAGAAAAAATCACTGTGCACCAACCCAGT
 ATCTTACAAAACAGCCGGCTGGCCACGAGGGCAGGGGATGGGAGAGGAGGGGGCACC
 CCTGGGCAGATGGCTGGGTACCTGGAATGGCTTGGGTAGAAAAGAAAAGGGGACTCCCAG
 ATGGGAGGGGACTGATTGTCTAATGGGAGGGGTGAAAAGGCACGTGAGATGAGGAGGT
 TTGAGGGGGCATGACAGGTGCTTTCTCCACGAGGCACAGTGTGGGGGGCTCA
 GTGCCACCACCTGCCACCTCTGGCACTGGAGAGCCAGTGACCTATGAACCCCGGCAT
 GGGCAGCCCACTTGAACACAGATGTCAGCCTGCCCTCCCACTGGGACCCCTTTCT
 TTGAGCCCGCTGGCTGGCCCGCCTCTCAGGACTTGGGGCTCAACTTATTCCTCAAT
 TCTTAAGCAACATTGCTGCAAGCCCAACACCTTAAGGCCAGGGCCAACAGGGAGGAC
 CAGGCGGGACGGTGGTGGGTGAAAACGTGGGTTGGTCCAGCTGGCTCCCCCATTTAGAA
 TACTAAAACCGAAATCATCCGGCACTCTACGGGGAAAGTATCCCCAGGGTGGAAAATTT
 ATCGCTTAAAACGGGCCCTTGGGTATCCTCAACCAGGGGGAAAAACACATATTTGTGG
 TGGGGAAGGTCACAAAGAAGGCCGGGCTGGGGCCATACGCGCTCTTCCCAACACACC
 CACCCTGGGGCTTCGGAGTTGTGTGGAGGTCCCAATAAGCCTAGGCGAGCCCGGGCGCC
 TAAAAGAAACAGGGTCCATGTGGGCCCTGTACCGAAGAGAAGGCGGGTCTCAGAAGAA
 GGGCAGCGGTGGTTCAAGCAGACACCACCNACATAAGTGTTCACCCACCACAGTGTATG
 CTGTTAGTGGTGTGCCACACACGGGGTGGCCCCACGGGCGATGGGGG

Restriction Sites:

NotI-NotI

ACCN:

NM_002569

Insert Size:

2385 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_002569.2](#), [NP_002560.1](#)

RefSeq Size: 4180 bp

RefSeq ORF: 2385 bp

Locus ID: 5045

UniProt ID: [P09958](#)

Cytogenetics: 15q26.1

Domains: Peptidase_S8, P_proprotein, FU

Protein Families: Druggable Genome, Protease, Transmembrane

Gene Summary: This gene encodes a member of the subtilisin-like proprotein convertase family, which includes proteases that process protein and peptide precursors trafficking through regulated or constitutive branches of the secretory pathway. It encodes a type 1 membrane bound protease that is expressed in many tissues, including neuroendocrine, liver, gut, and brain. The encoded protein undergoes an initial autocatalytic processing event in the ER and then sorts to the trans-Golgi network through endosomes where a second autocatalytic event takes place and the catalytic activity is acquired. Like other members of this convertase family, the product of this gene specifically cleaves substrates at single or paired basic residues. Some of its substrates include proparathyroid hormone, transforming growth factor beta 1 precursor, proalbumin, pro-beta-secretase, membrane type-1 matrix metalloproteinase, beta subunit of pro-nerve growth factor and von Willebrand factor. It is thought to be one of the proteases responsible for the activation of HIV envelope glycoproteins gp160 and gp140, and may play a role in tumor progression. Unlike SARS-CoV and other coronaviruses, the spike protein of SARS-CoV-2 is thought to be uniquely cleaved by this protease. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2020]
Transcript Variant: This variant (1) represents the predominant transcript. Variants 1, 2, and 3 encode the same protein.