

## Product datasheet for **SC115259**

### **NCF4 (NM\_013416) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NCF4 (NM_013416) Human Untagged Clone
Tag:	Tag Free
Symbol:	NCF4
Synonyms:	CGD3; NCF; P40PHOX; SH3PXD4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_013416, the custom clone sequence may differ by one or more nucleotides

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ATGGCTGTGGCCAGCAGCTGCGGGCCGAGAGTGACTTTGAACAGCTTCCGGATGATGTTGCCATCTCGG  
CCAACATTGCTGACATCGAGGAGAAGAGAGGCTTCACCAGCCACTTTGTTTTCGTCATCGAGGTGAAGAC  
AAAAGGAGGATCCAAGTACCTCATCTACCGCCGCTACCGCCAGTCCATGCTTTGCAGAGCAAGCTGGAG  
GAGCGCTTCGGGCCAGACAGCAAGAGCAGTGCCCTGGCCTGTACCCTGCCACACTCCCAGCCAAAGTCT  
ACGTGGGTGTGAAACAGGAGATCGCCGAGATGCGGATACCTGCCCTCAACGCCTACATGAAGAGCCTGCT  
CAGCCTGCCGGTCTGGGTGCTGATGGATGAGGACGTCCGGATCTTCTTTTACCAGTCGCCCTATGACTCA  
GAGCAGGTGCCCCAGGCACTCCGCCGGTCCGCCCGCGCACCCGAAAGTCAAGAGCGTGTCCCCACAGG  
GCAACAGCGTTGACCGCATGGCAGCTCCGAGAGCAGAGGCTCTATTTGACTTCACTGGAAACAGCAAAT  
GGAGCTGAATTTCAAAGCTGGAGATGTGATCTTCTCCTCAGTCGGATCAACAAAGACTGGCTGGAGGGC  
ACTGTCCGGGGAGCCACGGGCATCTTCCCTCTCTCCTTCGTGAAGATCCTCAAAGACTTCCCTGAGGAGG  
ACGACCCCACTGGCTGCGTTGCTACTACTACGAAGACACCATCAGCACCATCAAGTCTGTGGCCTG  
GGAGGGAGGGGCTGTCCAGCCTTCTGCCATCCCTACGACCACTGCCCTCACATCACCTTCTCATGGG  
TCCCTCTCCACTCAAAGCCCCAGTGCTCCAGATGAGCCACAATGCTGTAACAAGCCATCAACGTC  
CAGGGTGGCCTGGCCAGCCTCATTCCCTTTCCCCACCCACACCCACTTCCAGCCTGATGCCTCCTT  
ACTCCAGCCTGTACCCCTTAGGGACATCGCGGTGGAGGAAGATCTCAGCAGCACTCCCCTATTGA
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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_013416 unedited</p> <pre> CCCAATTTGTAATACGAACCTACTATAGGGCGGCCGGAATTCGCACGAGGGGGACTCCC AGACCACAGCTGAGACGAGACGCAGGGTGGCTGGAGGAAGTGAGAGGTGAACTCAGCCTG GGACTGGCTGGGCGAGACTCTCCACCTGCTCCCTGGGACCATCGCCACCATGGCTGTGG CCCAGCAGCTGCGGGCCGAGAGTACCTTTGAACAGCTTCCGGATGATGTTGCCATCTCGG CCAACATTGCTGACATCGAGGAGAAGAGAGGCTTACCAGCCACTTTGTTTTCGTCATCG AGGTGAAGACAAAAGGAGGATCCAAGTACCTCATCTACCGCCGCTACCGCCAGTTCATG CTTTGCAGAGCAAGCTGGAGGAGCGCTTCGGGCCAGACAGCAAGAGCAGTGCCCTGGCCT GTACCCTGCCCACTCCAGCCAAAGTCTACGTGGGTGTGAAACAGGAGCTCGCCGAGA TGCGGATACCTGCCCTCAACGCCTACATGAAGAGCCTGCTCAGCCTGCCGGTCTGGGTGC TGATGGATGAGGACGTCCGGATCTTCTTTTACCAGTCGCCCTATGACTCAGAGCAGGTGC CCCAGGCACTCCGCCGGCTCCGCCCGGCACCCGGAAAGTCAAGAGCGTGTCCCCACAGG GCAACAGCGTTGACCGCATGGCAGCTCCGAGAGCAGAGGCTCTATTTGACTTCACTGGAA ACAGCAAACCTGGAGCTGAATTTCAAAGCTGGAGATGTGATCTTCTCCTCAGTCCGATCA ACAAAGACTGGCTGGAGGCACTGTTCCGGGAGCCACGGGCATCTCCCTCTCCCCTTCG TGAAGACCTCAAAGACTTCCCCTGAGAGGACACCCACCACTGGCTGCGTTGCTCTACA CGAAGACACATNGGACATCAGGACATGCGTGGAGGAGTCTCCAGCACTCCCTATGAAG ACTGCTGGACTACAGG </pre>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_013416 unedited</p> <pre> GGGGGGCGGGCCGNGCCCTTCNNNNNGTNNGTACTTGNACGCGGCCGCTTTTNNAN NGATCGGTTTTTTTTTTTTTTTTTTTTTTTTTCAAATGGATGGTTTTATTTAAATCAGATG TAAATAGTAGAAAAGAAGAAGATTACAAGCCCCACGGGTCCATTAGCCTAAAAACAGGAA GTCTGCCATCCTCCCAGTTTTCTGGTCCCAATCTCCTCTGAGAGCTGAAGTTTTTTG CTGGTGTCCCCTCACTGCTCCAGGGACCCGTCAGCTCATGGCATCGTGTGTAACCCT GTAGTTGTCTTCTGCGTGATGTGCAGCTTCCAGGGGAAGAGGCGCTTCTGGGAGGGAG GCCACGAGCCTGCCGCACCATGAGCGCTACGTCCTCATCCGACAGCAGCCGAACCAGATC CCCCTCAGCGTCCCGTAATTCAGAGCTATGTCCTCTCTCTGGAACCTCCCGCCTGTGAG CTCCAGCAGGTCTTTCAATAGGGGAGTGTGCTGAGATCTTCTCCACCAGGATGTCCTT GATGGTGTGATGGTGTCTTCGTAGTAGTAGCAACGCAGCCAGTTGGTGGGTGCTCCTC CTCAGGGAAGTCTTTGAGGATCTTCACGAAGGAGAGAGGGAAGATGCCCGTGGCTCCCCG GACAGTGCCCTCCAGCCAGTCTTTGTTGATCCGACTGAGGAGGAAGATCACATTTCCAGC TTTGAAATTCAGCTCCAGTTTGCTGTTTCCAGTGAAGCCAAATGAGCCTCTGCTCTCGGC CTGCCATGCCGTC AACGCTGTTGCCCTGGGGGACCCCTTTTTGACTTTCCCGGTGCCNC GGCCGGAACCGCCGAATGCCCTGGGGCACCTGCTTTGGATTATAAGGCGACTGGTAAAA AAAGAACCGGACGTCCTCATCCTTAG </pre>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_013416
<b>Insert Size:</b>	1470 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_013416.2</a> , <a href="#">NP_038202.1</a>
<b>RefSeq Size:</b>	1631 bp
<b>RefSeq ORF:</b>	1047 bp
<b>Locus ID:</b>	4689
<b>UniProt ID:</b>	<a href="#">Q15080</a>
<b>Cytogenetics:</b>	22q12.3
<b>Domains:</b>	SH3, PX
<b>Protein Pathways:</b>	Leukocyte transendothelial migration
<b>Gene Summary:</b>	<p>The protein encoded by this gene is a cytosolic regulatory component of the superoxide-producing phagocyte NADPH-oxidase, a multicomponent enzyme system important for host defense. This protein is preferentially expressed in cells of myeloid lineage. It interacts primarily with neutrophil cytosolic factor 2 (NCF2/p67-phox) to form a complex with neutrophil cytosolic factor 1 (NCF1/p47-phox), which further interacts with the small G protein RAC1 and translocates to the membrane upon cell stimulation. This complex then activates flavocytochrome b, the membrane-integrated catalytic core of the enzyme system. The PX domain of this protein can bind phospholipid products of the PI(3) kinase, which suggests its role in PI(3) kinase-mediated signaling events. The phosphorylation of this protein was found to negatively regulate the enzyme activity. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) represents the longer transcript and encodes the longer isoform (2). This isoform (2) lacks the PC (Phox and Cdc24p) motif, which may be important for the interaction with NCF2.</p>