

## Product datasheet for **SC303498**

### NOTCH4 (NM\_004557) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NOTCH4 (NM\_004557) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** NOTCH4  
**Synonyms:** INT3  
**Mammalian Cell Selection:** None  
**Vector:** [pCMV6-XL5](#)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_004557 edited  
 CAGGCCGAGGAGGAAGAAGAGGGGCAGTGGGAGCAGAGGAGGTGGCTCCTGCCCCAGTGA  
 GAGCTCTGAGGGTCCCTGCCTGAAGAGGGACAGGGACTGGGGCTTGAGAAAGGGGCTGTG  
 GAATGCAGCCCCCTTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTATGTGTCTCAGTGG  
 TCAGACCCAGAGGGCTGCTGTGTGGGAGTTTCCAGAACCCTGTGCCAATGGAGGCACCT  
 GCCTGAGCCTGTCTCTGGGACAAGGGACCTGCCAGTGTGCCCTGGCTTCTGGGTGAGA  
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 AAGCCCTGCTTCCCGCTCCCTAGGGCTCCCCAGCTCTCCCTCTCCATTGACACCCAGCT  
 TCTTGTGCACTTGCTCCCTGGCTTCACTGGCGAGAGATGCCAGGCCAGCTTGAAGACC  
 CTTGTCTCCCTCTTCTGTTCCAAAAGGGCCGCTGCCACATCCAGGCCTCGGGCCGCC  
 CACAGTGTCTCATGCCTGGATGGACAGGTGAGCAGTGCCAGCTTCGGGACTTCTGTT  
 CAGCCAACCCATGTGTTAATGGAGGGGTGTGTCTGGCCACATACCCCCAGATCCAGTGCC  
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 TCAGCCACCAGTGTGAGAATGGGGCACCTGCCAGGATGGGCTGGACACCTACACCTGCC  
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 AGGGTCCCCCTCACTGCAGAAACGGGGCACCTGCCAGAACTCTGCTGGTAGCTTCACT  
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 GCCACCTGGACGCACAGGACTCCTGTGCCACTTGAAGACATGTGTCTGAGCCAGCCGT  
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 AAGGCCAAGTCCCTGTGAACATGGCGTTCTGCCTCAACACTCCTGGCTCCTTCAACT  
 GCCTCTGTCCACCTGGCTACACAGGCTCCCGTTGTGAGGCTGATACAATGAGTGCTCT



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CCCAGCCCTGCCACCCAGGAAGCACCTGTCTGGACCTACTTGCCACCTTCCACTGCCTCT  
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 AGGCCACAGGAGGCAGAGTGGAGTGGAAATACCCCTAAGTTGGAACCAAGAATTGCAGG  
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 ATTGTCCCCTGCCCACAAATGGCTGACAAATATTTATTGGGCACCTACTATGTGCCAG  
 GCACTGTGTAGGTGCTGAAAAGTGGCCAAGGGCCACCCCGCTGATGACTCCTTGATTC  
 CCTCCCCTCACAACAAAGAACTCCACTGTGGGGATGAAGCGCTTCTTCTAGCCACTGCTA  
 TCGCTATTTAAGAACCCTAAATCTGTCACCCATAATAAAGCTGATTTGAAGTGTTAAAAA  
 AAAAAAAAAAAAA

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_004557 unedited  
 TTTTGTCCGTTTACATTTGTAATACCACNCACTATAGGGCGGCCGCGGAATTGCGACCA  
 GGCAGGCCGAGGAGGAAGAAGAGGGCAGTGGGAGCAGAGGAGGTGGCTCCTGCCCCAGT  
 AGAGCTCTGAGGGTCCCTGCCTGAAGAGGGACAGGGACTGGGGCTTGGAGAAGGGGCTGT  
 GGAATGCAGCCCCCTTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTATGTGCTCAGTG  
 GTCAGACCCAGAGGGCTGCTGTGTGGGAGTTTCCAGAACCCTGTGCCAATGGAGGCACC  
 TGCTGAGCCTGTCTCTGGGACAAGGGACCTGCCAGTGTGCCCTGGCTTCTGGGTGAG  
 ACGTGCCAGTTTCTGACCCCTGCCAGAACGCCAGCTGTGCCAAAATGGAGGCAGCTGC  
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 CCTTGTCTCCCTCCTTCTGTTTCAAAGGGGCGCTGCCACATCCAGGCCTCGGGCCGC  
 CCACAGTGCTCCTGCATGCCTGGATGGACAGGTGAGCAGTGCCAGCTTCCGGACTTCTGT  
 TCAGCCAACCCATGTGTTAATGGAGGGGTGTGTCTGGCCACATACCCCCAGATCCAGTGC  
 CACTGCCACCCGGCTTCCAGGGCCATGCCTGTGAACGTGATGTCAACGAGTGCTTCCAG  
 GACCCATGACCTGCCCCATGGCACCTCCTGCCATAACACCCTGGGCTCCTTCCAGTGC  
 CTCTGCCCTGTGGGGCAAGACGGTCCAC

<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_004557 unedited TTNCCCGCCTTGGTGATGGCACTTCCCAGNCCAGNGAGCACTGGGGNAGGGTCACA GGNTGCCACCCGGGNATCTGTTCAGNAAACAGCTATGACCGCGGCCGCAATCTAGAGTCG AGTTTTTTTTTTTTTTTTTAACTTCAAATCAGCTTTATTATGGGTGACAGATTTAGG GTTCTTAAATAGCGATAGCAGTGGCTAGAAGAAGCGCTTCATCCCCACAGTGGAGTTCTT TGTTGTGAGGGGAGGGAATGCAAGGAGTCATCAGCGGGGTGGCCTTGGCCACTTTTCA GCACCTACACAGTGCCTGGCACATAGTAGTGCCCAATAAATATTTGTCAGCCATTTGTG GGCAGTGGGGACAATGGATCATAGGGGCACCCTTTGGAAACCATATATAGGAAAGAACAT CTTACATCCCATATGCCTGCAATTCTTGGTTCCAATTAGGGGTATTTCCACTCCACTCT GCCCTCTGTGGCTGTCTATTTTCTGGAGGAGGACTGGCCTGCCTCATCCTAGCATC TTAAACCCTCTTCCAGAGCTGCAGCTTCTCCAGTGGAAGATGTCTGCTCTGGTGGCA TACATTATTTAGGAGAGAACTAACTCACACCCTTCATTTTGGGGATCCATCTTA AAACCAGGAAGGCCTTCCAGCCTGCCTTTAATGGTAATCATTTTGGAAATTCCTCCT ACCATGTATTCTTATTTTTACCTCTCCTCCTTGGTTTATGGGCATTTCTTGGGAGG CTGGGGACCACAGTCAAGTTGAGGTGATCCCCGCTCCGGGGACGGAGTAAGCAAGGNA GCGGGATCCGGATGTTNTGNAGCAGAACCCGCAGCTCCCAGGA
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_004557
<b>Insert Size:</b>	6700 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>OTI Annotation:</b>	There are 17 nucleotide differences between the OriGene clone and the NCBI reference ORF. OriGene considers these to be polymorphisms and to reflect the natural differences between individuals. These result in the substitution of 5 amino acid ( 4 deletion and 1sub).
<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_004557.3</a> , <a href="#">NP_004548.3</a>
<b>RefSeq Size:</b>	6762 bp
<b>RefSeq ORF:</b>	6012 bp
<b>Locus ID:</b>	4855
<b>UniProt ID:</b>	<a href="#">Q99466</a>
<b>Cytogenetics:</b>	6p21.32

**Protein Families:** Druggable Genome

**Protein Pathways:** Dorso-ventral axis formation, Notch signaling pathway

**Gene Summary:** This gene encodes a member of the NOTCH family of proteins. Members of this Type I transmembrane protein family share structural characteristics including an extracellular domain consisting of multiple epidermal growth factor-like (EGF) repeats, and an intracellular domain consisting of multiple different domain types. Notch signaling is an evolutionarily conserved intercellular signaling pathway that regulates interactions between physically adjacent cells through binding of Notch family receptors to their cognate ligands. The encoded preproprotein is proteolytically processed in the trans-Golgi network to generate two polypeptide chains that heterodimerize to form the mature cell-surface receptor. This receptor may play a role in vascular, renal and hepatic development. Mutations in this gene may be associated with schizophrenia. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Jan 2016]  
Transcript Variant: This variant (1) represents the longest transcript and encodes the protein.