

Product datasheet for **MC225328**

Notch2 (NM_010928) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Notch2 (NM_010928) Mouse Untagged Clone
Tag: Tag Free
Symbol: Notch2
Synonyms: AI853703; N2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >MC225328 representing NM_010928
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCCCGCTCTGCGTCCCGCCGCTGCGGGCGTGTGGCTCTGGCTGTGCGGCGGGCCCCGCGC
ACGCTTTGCAGTGTGAGGTGGTCAAGAGCCCTGTGTAATGAAGGGACCTGTGTACCTACCACAACGG
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AACCGCTGTGAGAATGGTGGTACTTGTGTGCCGAGGGCATGTTGGGAAAAGCTACCTGCCGATGTGCTC
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TGTGAGCTGGAGGTAAATGAATGCCAGAGCAACCCGTGTGTGAACAACGGGCAGTGTGTGGACAAAGTCA
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 AGCTTGGGCAGGTTACATCCAGTTCCTGTCCCAGCAGACTGGATGAACCGTGTGGAGATGAACGAGACCC
 AGTACAGTGAAATGTTTGGCATGGTCTGGCTCCTGCAGAGGGAGCCACCCTGGCATAGCAGCTCCCCA
 GAGCAGACCTCCGGAAGGGAAGCAGATGTCCACCAGCGGGAGCCCTTGCTCCCATCGTACTTTCCAG
 CTTATCCCAAAGGCAGCATTGCCAGGCAGCCGAGCTCCCAGACGAGTCCAGTTGCCCTCCAGCTG
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 GTCAAGCTCTTACCACACTCTGCATCTGACTGGTCAGATGTGACCACCAGCCAACTCCTGGAGGTGGT
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 GA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul
ACCN: NM_010928
Insert Size: 7422 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_010928.2](#), [NP_035058.2](#)

RefSeq Size: 10506 bp

RefSeq ORF: 7422 bp

Locus ID: 18129

UniProt ID: [O35516](#)

Cytogenetics: 3 42.42 cM

Gene Summary: Functions as a receptor for membrane-bound ligands Jagged-1 (JAG1), Jagged-2 (JAG2) and Delta-1 (DLL1) to regulate cell-fate determination (PubMed:10393120). Upon ligand activation through the released notch intracellular domain (NICD) it forms a transcriptional activator complex with RBPJ/RBPSUH and activates genes of the enhancer of split locus (PubMed:10393120, PubMed:18710934). Affects the implementation of differentiation, proliferation and apoptotic programs (PubMed:10393120, PubMed:18710934). May play an essential role in postimplantation development, probably in some aspect of cell specification and/or differentiation (By similarity). In collaboration with RELA/p65 enhances NFATc1 promoter activity and positively regulates RANKL-induced osteoclast differentiation (PubMed:18710934). Positively regulates self-renewal of liver cancer cells (By similarity). [UniProtKB/Swiss-Prot Function]