

## Product datasheet for **MG208731**

### **Dtx1 (BC053055) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dtx1 (BC053055) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dtx1
Synonyms:	Fxit1; mKIAA4160
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MG208731 representing BC053055  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCATCAGTTCGGCAAGACACAGGTACCATGCGGCCGGTGCAGCACAATTCTACGATCCATCGTCGG  
 CGCCGGCAAGGCATCGTGTGGGAATGGGAGAAGCAGCGCGGGCGTGGACGGCTACGACATGGACAT  
 CTGCATACCATCCAGAACCGGTACGAGAAGCAGCACCCGTGGCTCGACCTCTCATCGCTCGGCTTCTGC  
 TACCTCATCTACTTCAACAGCATGTCCAGATGAACCGCCAGACGCGCCGCCGCCCGCTGCGCCGTC  
 GCCTGGACCTGGCTTACCCGCTCACTGTGCGCTCCATTCCAAGTCGCAATCCTGGCCCGTGGGAGCCAG  
 CTCGGGTAGCCCTGCTCCTGTGAGCAGTGCCTGCTGGTCAACAGCAGCGCGCCGCCCTCCAACGCCATC  
 CTGGCCTCGCAGCGCCGAAGGCTCCATTGCGCCAGCCGCGCTCCAGCGCCCCCTCGCCCCCGCCG  
 CGCTGCCACCCGGAGGACCTCCGGGTGCGCTCGTTGTGCGCCCCAGCGCCACTTTCGCCGGAGTGCCT  
 CTGGGCCGACCTGCCACCGGCCACGGAGCCTGCGCCGCTCCAGGAGTTCGCCAAGGAGCCCTAGT  
 GCCCCAAACGGAGCGCCACACCGGGCCAAAACAACCTCAGTCGACCAGGACCACAGAGGTCACCCAGCG  
 TCAGCGCACGCGCCTCTATCCCGCTGGGGTCCGGCGCTCCCGTGAAGAACTGAATGGCACTGGCCC  
 TGTCCACCCAGCCTTGGCAGGGATGACCGGGATCCTGCTGTGTGACGCGGGGCTGCCGGTGTGCCTGACA  
 CGAGCACCCAAACCCATCCTGCACCCACCAGTAAGCAAAAGCAGCGTGAAGCCTGTGCCTGGAGTGC  
 CCGGCGTGTGCCGAAGCAAGAAGAAACACCTCAAGAAAAGCAAGAATCCTGAGGATGTGGTTCGGAG  
 GTACATGCAGAAGGTGAAAAACCCGCTGATGAGGACTGTACATTTGCATGGAGCGGCTGGTACAGCA  
 TCTGGCTATGAGGGCGTCTCCGAAACAAGAGTGTGCGGCCGAGCTTGTGGCCGCTGGGCCGCTGCG  
 GCCAATGTATCACCTGCTCGCTGCTGGTGGCCATGTAATCCAATGGCAACAAGGATGGCAGCTGCAGT  
 TCCAACCTGCAAAAGCCATCTACGGGGAGAAGACAGGGACACAGCCACCAGGGAAGATGGAGTTTCACCTC  
 ATCCCGCACTCGCTGCCTGGTTTTGCAGACACCCAGACGATCCGCATCGTCTATGACATCCCCACGGCA  
 TCCAGGGCCCTGAACATCCCAACCCAGGCAAGAAGTTCACAGCCAGAGGCTTCCCTCGCCACTGCTACCT  
 ACCCAACAATGAGAAGGGCCGAAAGGTGCTGAGATTGCTCATCACCGCTGGGAACGCAGACTCATCTTC  
 ACTATCGGAACATCCAACACCACGGGCGAGTCGGACACCGTGGTGTGGAACGAGATTACCACAAGACGG  
 AGTTTGGTTCCAACCTCACTGGTACGGCTACCCCGACGCCAGCTACCTAGACAACGTGCTGGCTGAGCT  
 CACCGCCAGGGGTTTCTGAGGCCATGGCCAAGGCC

AGCGGACCGACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG208731 representing BC053055  
 Red=Cloning site Green=Tags(s)

MHQFRQDTGTMRPVRRNFYDPSSAPGKGIWVWENDGGAWTAYDMDCITIQNAYEKQHPWLDLSSLGFC  
 YLIYFNSMSQMNRTRRRRRLRRRLDLAYPLTVGSIQKSWPVGASSGQPCSCQCLLVNSTRASNAI  
 LASQRRKAPIAPAAPPAPPPPPPLPPGPPGALVVRPSATFAGAALWAPATGPTEPAPPVPPRSPS  
 APNGAPTPGQNNLSRPGPQRSTSVSARASIPPGVPALPVKLNLTGPVHPALAGMTGILLCAAGLPVCLT  
 RAPKPIILHPPVSKSDVKVPGVPGVCRKTKKKHLKSKNPEDVRRYMQVKVKNPPDEDCTICMERLVTA  
 SGYEGVLRNKSVRPELVGRLGRCGHMYHLLCLVAMYSNGNKDGSLLQCPTCKAIYGEKGTGQPPGKMEFHL  
 IPHSLPGFADTQIRIVYDIPTGIQGEHPNPGKFTARGFPRHCYLPNNEKGRKVLRLITAWERRLIF  
 TIGTSNTTGESDVTVVWNEIHHKTEFGSNLTGHGYPDASYLDNVLAELETAQGVSEAMAKA

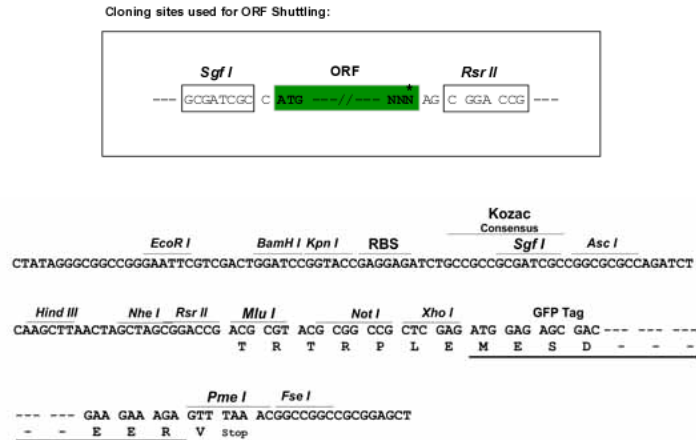
SGPTRRRLE – GFP Tag – V

**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja2103\\_e10.zip](https://cdn.origene.com/chromatograms/ja2103_e10.zip)

**Restriction Sites:**

Sgfl-RsrII

**Cloning Scheme:**


**ACCN:** BC053055

**ORF Size:** 1647 bp

**OTI Disclaimer:** 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](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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:** [BC053055.1](#)

**RefSeq Size:** 2882 bp

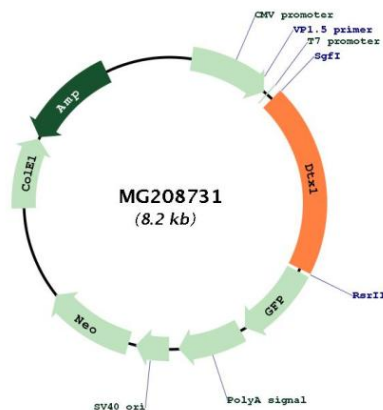
**RefSeq ORF:** 1649 bp

**Locus ID:** 14357

**Cytogenetics:** 5 60.64 cM

**Gene Summary:**

Regulator of Notch signaling, a signaling pathway involved in cell-cell communications that regulates a broad spectrum of cell-fate determinations. Mainly acts as a positive regulator of Notch, but it also acts as a negative regulator, depending on the developmental and cell context. Mediates the antineural activity of Notch, possibly by inhibiting the transcriptional activation mediated by MATCH1. Involved in neurogenesis, lymphogenesis and myogenesis, and may also be involved in MZB (Marginal zone B) cell differentiation. Promotes B-cell development at the expense of T-cell development, suggesting that it can antagonize NOTCH1. Functions as an ubiquitin ligase protein in vivo, mediating ubiquitination and promoting degradation of MEKK1, suggesting that it may regulate the Notch pathway via some ubiquitin ligase activity.[UniProtKB/Swiss-Prot Function]

**Product images:**

Circular map for MG208731