

## Product datasheet for **MC221272**

### **Dtx3l (NM\_001013371) Mouse Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dtx3l (NM_001013371) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Dtx3l
Synonyms:	AU042200; BC023741
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >MC221272 representing NM\_001013371  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTTCCAGTCCCACCCGCGCTCCCGCTACTCGTACGGCTGCGGGAGTCCATCCCCAAGCGCACA  
 GGAAGCTCGAGATATACTTCCAGAGCCGGCCTCGGGAGGTGGGAGTGCCTGTCCAGCCCGTGGGCC  
 CAGCGCCCCGGACACCTACGAGGTGAAGTTCCTAAAAAAGCAGATAAGGAGAAAGTGTGAAAAAGAGC  
 GAACACGAGATGTTGGTCCATAACAACTGTGACCATTGTCTGGAACTACTAAAAAGCCAGTAGAGG  
 ACCTGAGACCCAGACTCCCATCCTTGACACAGCCAGTGGAGACACCAAGCTCCAGACCTCCGTCCTTAC  
 GGGGTCTCTGGATGAAGCACTTTGTGATGACATACATCCCAGGACGGGCTCGTTTCTAACTCTGTTGAC  
 TCAGTTGTCCAAAAGATCTTCTTGCTGTGACCGCTGAGCTGAACTGTGACCTGCTCTCTAAAGAGCAGA  
 GAGCATCTATAACCACTGTCTGCCCTCACATCATAAAAGCATGGAGGGTGTGATGGAATTAAGAAGT  
 GTGTGGCAACTTCAAAGATATTGAAAAGATACATCACTTCTTGTGAGTGTGAGCAGCTTTTGGAAACGGGAGCAG  
 AAACGGAAGGGAAGCGAGCAGAAACGGAAGTGCGCCACAGAAACACACACCTCCCGATGTGGAGCGGG  
 AGCCCCCTGATCAGAGCAGTATTCAAGTTCCTGTGCTTCTCCTTGAATATTTCAAGCATGTTAATCCGGG  
 TAGACTAGAGTTCATAGAGTACAAATTTGGTGTAAACATTGAAATCCAAGCTAGTTCTCCCAATATGGTC  
 ACTGTAGGCTTCCCTCCAGCCATTTGGCAACGTAGAAGAAGCAAGTCAGTCTTTGTCCAGAGACTTTC  
 AGAAATGCTCGCAGTCTCTGAAGCAAGATTGTATCTCTTTAGAGGAGCACCAGAGAGCAAAGGAGGTGAG  
 ACAGGAGCTGAGTCGCTGCTTCCAAAGCTTTGATAAAGGGACAGGGAAGAAGCAGTCTCTCCGGC  
 TCTCCTGCTGACATTTAGCCGCCACAGAAAAAGTCTCCCAAGGCTTTGGCCTGAGACCTGTGAAAAATA  
 CCGCATCTGGGTACACGACGGGCATCGAGTTCGATTCAACACGCTTTAAGCTTCTAGAGCCTGAACTGCT  
 CCAGGAAATCTCAGAGATCGAGCAGAAGTTTAAACACCCGTGGCAAAGTCCAGGAAAAAGGCCAGAAACCC  
 TGCACTTTTTTGTCCCAAGGATAAAGACTTAGACCTGTGAGTGCAGTCTACACAGGTTTTACTGATG  
 CCTTCCAGCGTGCCACGTGGCAGCTGAGGACAGAAGTTCTGTGCTGAAAGGGTTGGCAAGGAGAGAGC  
 TCGCTTACACAATACCAAGTTTGGCCACAATTTAAAAAAGAGCACCCGAATGTGCACTTTGTGACATCT  
 CAGGAGTCAGTGACCTTGACTGGCTTGCCACATCACCTTGGCAGGCAATGCAGTATGTCTCCAAAAGAA  
 TGGGACTGGCACCCTCATCTGGAGAGAACTCGCTATGGATCAGGAAACCCCATGGAGATCAGCAGTAG  
 TGACCCCATGGAGATCAGCAGGAGAATGCAGCCTTACCTGCTCCCGAGGCACCTTAGCAGCCCTGCA  
 GCTTTCGAAGGGGACTGAGGACTACTGTGTCATCTGCATGGATACCATCAGCAACAAGCACGTGCTCCCA  
 AGTGCAAGCATGAATTCGCACCTCGTGTATCAGCAAAGCCATGCTTATCAAGCCTGTCTGTCTGTGTG  
 TCTGACTTCTACGGCATCCAGAAAGGGAACAGCCAGAGGGAACCATGTCTTACTCCACTCAAAAAGGG  
 TCACTTCCAGGTTATGAAGGCTGTGGCACCATTGTGATTAATTATGAAATAAAAGATGGCATCCAAACAA  
 AAGAGCACCCAAACCCAGGAAAGGCTTATCATGGAACACGGCGAACTGCATACTTGCTGATAATACTGA  
 GGAAGAAAGGTTTTGGATCTGCTCCACGAAGCCTTTAAGCACAGACTGACTTTCACAATAGGATACTCT  
 CGAGCAACAGGAGTCTCGGATGTCATTACATGGAATGATATTATCACAACAAATCCAAGTTTGGAGGAC  
 CAGCAAAATTTGGCTACCCTGATCTGATTACCTGAAACGTGTCAAGGAGGAGCTGAAAGCAAAAAGGCAT  
 TGAGTAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001013371  
**Insert Size:** 2247 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_001013371.2</a> , <a href="#">NP_001013389.2</a>
<b>RefSeq Size:</b>	5181 bp
<b>RefSeq ORF:</b>	2247 bp
<b>Locus ID:</b>	209200
<b>UniProt ID:</b>	<a href="#">Q3UIR3</a>
<b>Cytogenetics:</b>	16 B3
<b>Gene Summary:</b>	<p>E3 ubiquitin-protein ligase which, in association with ADP-ribosyltransferase PARP9, plays a role in DNA damage repair and in interferon-mediated antiviral responses. Monoubiquitinates several histones, including histone H2A, H2B, H3 and H4. In response to DNA damage, mediates monoubiquitination of 'Lys-91' of histone H4 (H4K91ub1). The exact role of H4K91ub1 in DNA damage response is still unclear but it may function as a licensing signal for additional histone H4 post-translational modifications such as H4 'Lys-20' methylation (H4K20me). PARP1-dependent PARP9-DTX3L-mediated ubiquitination promotes the rapid and specific recruitment of 53BP1/TP53BP1, UIMC1/RAP80, and BRCA1 to DNA damage sites. By monoubiquitinating histone H2B HIST1H2BH/H2BJ and thereby promoting chromatin remodeling, positively regulates STAT1-dependent interferon-stimulated gene transcription and thus STAT1-mediated control of viral replication. Independently of its catalytic activity, promotes the sorting of chemokine receptor CXCR4 from early endosome to lysosome following CXCL12 stimulation by reducing E3 ligase ITCH activity and thus ITCH-mediated ubiquitination of endosomal sorting complex required for transport ESCRT-0 components HGS and STAM. In addition, required for the recruitment of HGS and STAM to early endosomes.[UniProtKB/Swiss-Prot Function]</p>