

## Product datasheet for **MR218127**

### **Xylt1 (NM\_175645) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Xylt1 (NM_175645) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Xylt1
Synonyms:	8030490L12
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>MR218127 representing NM\_175645  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGTGGCGGCGCCGTGCGCCCGGAGGCTGGCGCGGCGCTCGCACTCGGCGCTGCTGGCGGCGCTCATGG  
 TGCTGCTGCTGCAGACGCTGGTGGTGTGGAATTCAGCAGCCTGGACTCCGGGGCTGGAGAGCAGCGGCG  
 CGCGGGGCGAGCGCGGGAGCAGCCGAGCAGCAGCAGCCCGCGGCCCGCGCCGGAGCGCAGGGACCTG  
 GCTGCCCATCTGCCCGCAGCCCGCGGAGGACCTGGAGGCCGAGCCGGGAGGAGGAGCAGCGGGAGGCG  
 GCCCGGAGGAGCCCGGCACAGCAGCCTGCCAGCCGCGGGGCACTAGCCTCCCGGGCGAGGGATCCACA  
 ACCAAGTCCACTGATCACCTAGAGACCCAGGATGGCTACTTCTCTCACCGTCCCAAAGAGAAAGTTCGG  
 ACCGACAGCAACAATGAGAACTCAGTCCCCAAGGACTTTGAGAATGTGGATAACAGCAACTTCGCCCCCA  
 GGACCCAGAAGCAGAAACACCAGCCAGAGCTGGCAAAGAAGCCCCCAGCAGGCAGAAAGAGCATTTCGA  
 GAGAAAGCTGGATGCCAGGACAAACGACAGGGCCAGTCACTCTGGGGAAAGGCCCAAGGAGGTGCTG  
 CCTCTCGGGAGAAAGCCACAGGCAACAGTAGCCAAGGGAAGGATCTCTCAAGACACAGCCATGCCAGGA  
 AGAGTGGTGGTGGTGGTCCCCGAAACCAAGTCTGACCAGGCCCCCAAGTGTGATATCTCTGGCAAGGA  
 GGCCATCTCAGCACTGACCCGCGTAAGTCCAAGCATTGTGCGCCAGGAGATTGCAGAAACCTACTGTGCG  
 CACAAGCTGGGGCTGCTGATGCCAGAGAAGGTGGCTCGATTCTGTCCCCTAGAAGGCAAAGCCAAACAAGA  
 ATGTCCAGTGGGATGAGGATGCTGTGGAGTACATGCCTGCCAACCAGTCAAGATCGCCTTTGTCTGGT  
 GGTCCATGGCCGTGCCTCTGACAGCTACAGCGCATGTTCAAGGCCATCTACCACAAAGACCATTCTAC  
 TATATCCATGTGGATAAGCGTTCCAATTACCTGCATCGCAAGTCTCCAGTTCTCCAGGCAGTACGACA  
 ATGTCCGAGTCACTCTGGAGGATGGCCACCATTGGGGTGGAGCCAGCCTCTGTCCACTACCTGCA  
 GAGCATCGGGATCTACTAGAGATGACTGACTGGCCCTGGGACTTCTTCATCAACCTCAGTGTCTGAC  
 TACCCCATCAGGACAAATGACCAGCTGGTAGCATTCTTTCCAGATATCGAGATATGAACCTCTGAAGT  
 CACATGGCCGGGACAATGCAAGTTTCATCCGGAAGCAGGGCTGGACCGCTCTTCTGGAGTGTGATAC  
 ACACATGTGGCGCTGGGGGACCGCGGATCCCAGAGGGCATTGCTGTGGATGGTGGTTCTGATTGGTTC  
 CTGCTAAACAGGAAGTTGTAGAGTATGTGGCATTCTCCACAGATGACCTGGTGACCAAGATGAAGCAGT  
 TCTACTTTACACCTTCTCCCTGCTGAGTCTTTTTCCACACGGTCTAGAGAACAGCCCCACTGTGA  
 CACCATGGTGGATAACAACCTGCGCATCACTCAACTGGAACCGCAAGCTGGGCTGCAAGTCCAGTACAAG  
 CATATCGTGGACTGGTGGGCTGCTCTCCAATGACTTCAAGCCTCAGGACTTCCATCGCTTCCAGCAGA  
 CAGCCCCGCCACCTTCTTTGCCGAAAGTTCGAAGCCATAGTGAACCAGGAGATCATTGGGCAGCTGGA  
 CTCTTACCTGTACGGAACTATCCTGCGGGCACCCCGGGCTCCGCTCCTACTGGGAGAATGTCTACGAT  
 GAACCAGATGGCATCCACACCCTCAGCGATGTAGCCCTCACCTGTACCATTCTTCATCCGCTCTGGGTC  
 TTCGAAGAGCTGAGTCACTCCCTACACACGGATGGGGAGAACAGCTGCAGGTAACCCATGGGCCACCC  
 AGCTTCTGTCCATCTCTACTTCTTGTGACCGATTCCAGGGCTTTCTGATCAAGCATCACGTGACCAAC  
 CTTGCTGTGAGCAAACCTGGAGACTGGAGACATGGATGATGCCAAAGAAAGTCTCAAGGTCGCAAGTC  
 CCCCCAGTGACTTTGGAAGGCTTCAGTTTTCTGAGGTTGGCACTGACTGGGATGCCAAGGAGAGGCTGTT  
 CCGGAACCTTGGTGGTCTTTTGGGGCCCATGGATGAGCCGGTGGGGATGCAGAAATGGGGAAAGGGGCC  
 AATGTGACCGTGACTGTTATTTGGGTGGATCCTGTCAACGTATTGCAGCCACCTATGATATCTGATTG  
 AGTCCACTGCGGAATTCACACACTACAAGCCCTTTGAATCTGCCTCTGAGGCTGGGGTCTGGACAGT  
 GAAGATTCTCCATCACTGGGTGCCAGTGGCAGAGACCAAATTCCTTGTGGCACCTTTGACCTTTTCAAC  
 AAGCAGCCATCAAACCAGAGGAGGCTTTGAAGCTGCACAATGGGCCACCTCGCAGTGCCTACATGGAGC  
 AGAGTTTCCAGAGCCTGAACCCAGTCTCAGCCTGCACATCAATCCTGCCAAGTGAACAGGCCCGGAA  
 GAATGCAGCCTTACCGGGACAGCGCTAGAAGCCTGGCTGGACTCGTGGTGGTGGGACTTGGACTGCC  
 ATGGACATCTGCACCACAGGCCACCCTGCCAGTCAAGCAGACTGCAGACCTGCAGCCAAACAGCCTGGAGT  
 CCTCAGCCCTGATCCCAAGTCAAGCTGGGTGCAGTCAAACCTGACGGACGGCTCAGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR218127 representing NM\_175645  
 Red=Cloning site Green=Tags(s)

MVAAPCARRLARRSHSALLAALMVLQLVWVNFSSLDGAGEQRRAGAAAGAAEQQPAAAPRRERDL  
 AAHLPAARGGPGGRAGGGGARGGGPGGARAQQPASRGALASRARDPQPSPLITLETQDGYFSHRPKEKVR  
 TDSNNENSVPKDFENVDNSNFAPRTQKQKHQPELAKKPPSRQKEHLQRKLD AQDKRQGSVLGKGPKEVL  
 PPREKATGNSSQKDL SRHSARKSGGGGSPETKSDQAPKCDISGKEAISAL TRAKSKHCRQEIAETYCR  
 HKLGLLMPEKVARFCPLEGKANKNVQWDEDAVEYMPANPVRIAFVLVHGRASRQLQRMFKAIYHKDHFY  
 YIHVDKRSNYLHRQVLQFSRQYDNVVRTSWRMATIWGGASLLSTYLQSMRDLEMTDWPWDFINLSAAD  
 YPIRTNDQLVAFLSRYRDMNFKSHGRDNARFIRKQGLDRLFLECDTHMWRLGDRRIPEGIAVDGGSDWF  
 LLNRKFVEYVAFSTDDLVTMVKQFYSYLLPAESFFHTVLENSPHCDTMVDNLRITNWNKLGCKCQYK  
 HIVDWCGCSPNDFKPKQDFHRFQQTARPTFFARKFEAIVNQEIIGQLDSYLYGNYPAGTPGLRSYWENVYD  
 EPDGIHTLSDVALTYHSFIRLGLRRAESSLHTDGENSCRYPMGHPASVHLYFLADRFQGFLLIKHHVTN  
 LAVSKLETLETWMPKKVFKVASPPSDFGRLQFSEVGTWDAKERLFRNFGGLLGPMDPEVGMQKWKGP  
 NVTVTVIWVDPVNVIAATYDIL IESTAEFTHYKPLNPLRPGVWTVKILHHWVPAETKFLVAPLTF SN  
 KQPIKPEEALKLHNGPPRSAYMEQSFQSLNPVLSLHINPAQVEQARKNAAFGTALAEAWLDSL VGGTWT A  
 MDICTTGPTACPMQTCSTAWSSFSPDPKSELGAVKPDGRLR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9002\\_h08.zip](https://cdn.origene.com/chromatograms/mm9002_h08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



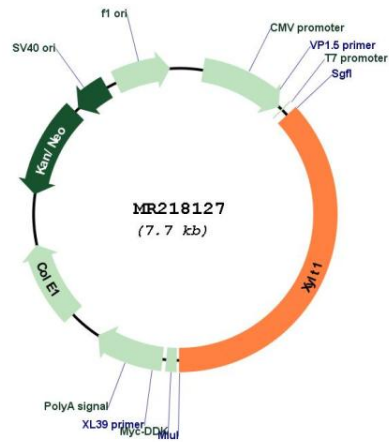
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_175645

**ORF Size:** 2859 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_175645.3</a> , <a href="#">NP_783576.2</a>
<b>RefSeq Size:</b>	3070 bp
<b>RefSeq ORF:</b>	2862 bp
<b>Locus ID:</b>	233781
<b>UniProt ID:</b>	<a href="#">Q811B1</a>
<b>Cytogenetics:</b>	7 F1
<b>MW:</b>	107.7 kDa
<b>Gene Summary:</b>	Catalyzes the first step in the biosynthesis of chondroitin sulfate and dermatan sulfate proteoglycans, such as DCN. Transfers D-xylose from UDP-D-xylose to specific serine residues of the core protein. Required for normal maturation of chondrocytes during bone development, normal onset of ossification and normal embryonic and postnatal skeleton development, especially of the long bones.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR218127