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Product datasheet for RC208572

XYLT2 (NM_022167) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	XYLT2 (NM_022167) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	XYLT2
Synonyms:	PXYLT2; SOS; XT-II; XT2; xylT-II
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC208572 representing NM_022167
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGGCGAGCGCGCGAGTGCAGAAGCTGGTGCGGCGCTACAAGCTGGCGATTGCCACGGCGCTGGCCA
TCCTGCTGCTGCAGGGCCTGGTAGTGTGGAGCTTCAGCGGCCTGGAGGAGGACGAGGCGGGCGAGAAAGG
AAGGCAGAGGAAGCCACGGCCACTGGACCCTGGCGAAGGTTCCAAGGACACAGACAGTTCAGCAGGGCGA
CGGGGCAGCACAGGCAGAAGGCATGGGCGCTGGCGGGGCCGTGCTGAGAGCCCAGGAGTGCCCGTGGCCA
AGGTGGTACGGGCAGTAACCAGCCGGCAGAGAGCCAGCCGGCGGGTCCCACCTGCCCCACCTCCGGAAGC
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TGCTGGAAATCCTGGACTTCCACCTGTACGGCAGCTACCCCCCCGGCACGCCAGCCCTCAAGGCCTACTG
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TTCGCCCGCCTCAGCCTGCACCATGCCGCCACTGCTGCACCCCCAATGGGCACCCCACTCTGCAGGTTTG
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AACGAGTACATGGAGCAGAGTTTCCAGGGCCTGAGTAGCATCCTGAACCTGCCTCAGCCGGAGCTCGCGG
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208572 representing NM_022167
Red=Cloning site Green=Tags(s)

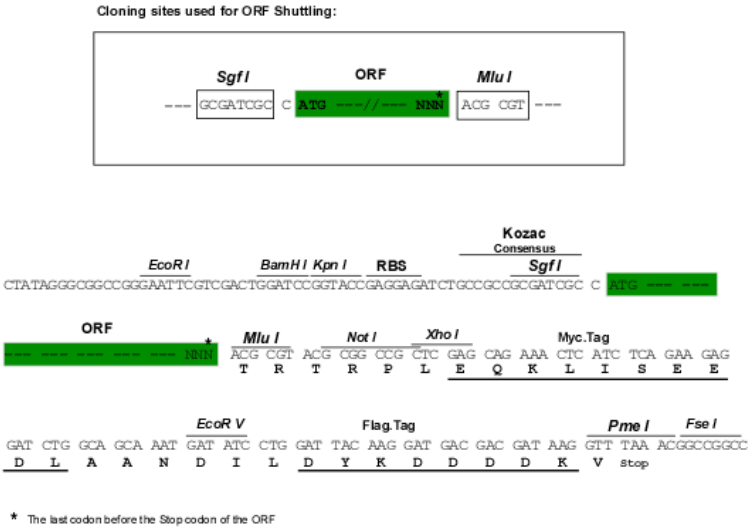
MVASARVQKLVRRYKLAIATALAILLLQGLVVWSFSGLEEDEAGEKGRQRKPRPLDPGEGSKDTDSSAGR
RGSTGRRHGRWRGRAESPGVPVAKVVRAVTSRQRASRRVPPAPPPEAPGRQNLSGAAAGEALVGAAGFPP
HGDTGSVEGAPQPTDNGFTPKCEIVGKDALSALARASTKQCQQEIANVVCLHQAGSLMPKAVPRHCQLTG
KMSPGIQWDESQAQQPMDGPPVRIAYMLVVHGRAIRQLKRLLKAVYHEQHFFYIHVDKRSDYLHREVVEL
AQGYDNVRVTPWRMVTIWGGASLLTMYLRSMRDLLEVPGWAWDFFINLSATDYPTRTNEELVAFLSKNRD
KNFLKSHGRDNSRFIKKQGLDRLFHECDSHMWRLGERQIPAGIVVDGGSDWFVLTRSFVEYVVYTDDPLV
AQLRQFYTYTLLPAESFFHTVLENSLACETLVDNNLRVTNWNRKLGCKCQYKHIVDWCGCSPNDFKPQDF
LRLQQVSRPTFFARKFESTVNQEVLEILDFHLYGSYPPGTPALKAYWENTYDAADGPSGLSDVMLTAYTA
FARLSLHHAATAAPPMGTPLCRFEPRGLPSSVHLYFYDDHFQGYLVTQAVQPSAQGPAETLEMWLMPQGS
LKLLGRSDQASRLQSLEVGTDWDPKERLFRNFGGLLGPLDEPVAVQRWARGPNLTATVVWIDPTYVVATS
YDITVDTETEVTQYKPPLSRPLRPGPWTVRLLQFWEPLGETRFLVLPLTFNRKLPLRKDDASWLHAGPPH
NEYMEQSFQGLSSILNLPQPELAEEAAQRHTQLTGPALEAWTDRELSSFWSVAGLCAIGPSPCPSLEPCR
LTSWSSLSPDPKSELGPVKADGRLR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2743_b01.zip

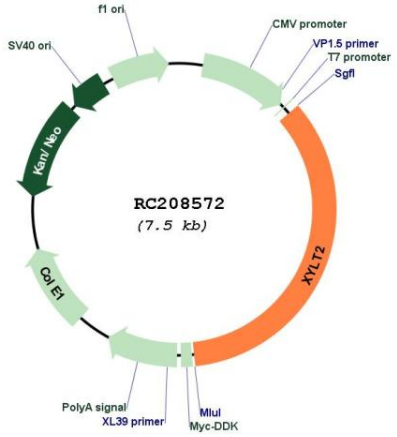
Restriction Sites: SgfI-MluI

Cloning Scheme:

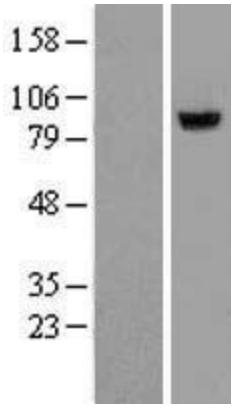


ACCN:	NM_022167
ORF Size:	2595 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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:	NM_022167.1, NP_071450.1
RefSeq Size:	3567 bp
RefSeq ORF:	2598 bp
Locus ID:	64132
UniProt ID:	Q9H1B5
Cytogenetics:	17q21.33
Domains:	Branch
Protein Families:	Transmembrane
Protein Pathways:	Chondroitin sulfate biosynthesis, Heparan sulfate biosynthesis, Metabolic pathways
MW:	96.6 kDa
Gene Summary:	The protein encoded by this gene is an isoform of xylosyltransferase, which belongs to a family of glycosyltransferases. This enzyme transfers xylose from UDP-xylose to specific serine residues of the core protein and initiates the biosynthesis of glycosaminoglycan chains in proteoglycans including chondroitin sulfate, heparan sulfate, heparin and dermatan sulfate. The enzyme activity, which is increased in scleroderma patients, is a diagnostic marker for the determination of sclerotic activity in systemic sclerosis. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Dec 2013]

Product images:



Circular map for RC208572



Western blot validation of overexpression lysate (Cat# [LY411722]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208572 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).