

Probable galacturonosyltransferase-like 1 (GATL1), Recombinant Protein

Cat *RP05080*

Size 0.5 mg (*E-Coli*)/ 0.05 mg (*Baculovirus*)/ 0.5 mg (*Yeast*)/ 0.05 mg
(*Mammalian-Cell*)/ 1 mg (*E-Coli*)/ 0.1 mg (*Baculovirus*)/ 1 mg
(*Yeast*)/ 0.1 mg (*Mammalian-Cell*)

Species

Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Probable galacturonosyltransferase-like 1 (GATL1), partial

Product Gene Name

GATL1 recombinant protein

Product Synonym Gene Name

GATL1

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Sequence

MSQHLLLLIL LSLLLHKPI SATTIIQKFK EAPQFYNSAD CPLIDDSSEDDDVAKPIFC SRRAVHVAMT
LDAAYIRGSV AAVLSVLQHS SCPENIVFHF VASASADASS LRATISSSFP YLDFTVYVFN VSSVSRLISS
SIRSALDCPL NYARSYLADL LPPCVRVVY LDSDLILVDD IAKLAATDLG RDSVLAAPEY CNANFTSYFT
STFWSNPTLS LTFADRKACY FNTGVMVIDL SRWREGAYTS RIEEWMAMQK RMRIYELGSL PPFLLVFAGL
IKPVNHRWNQ HGLGGDNFRG LCRDLHPGPV SLLHWSGKGK PWARLDAGRP CPLDALWAPY DLLQTPFALD
S

Sequence Positions

1-351

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or *Yeast* or *Baculovirus* or *Mammalian Cell*

Molecular Weight

39,020 Da

Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week.
Repeated freezing and thawing is not recommended.

Protein Family

Probable galacturonosyltransferase

NCBI Accession

NP_564077.1

NCBI GI

18394719

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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(*Yeast*)/ 0.1 mg (*Mammalian-Cell*)

NCBI GenBank Nucleotide

NM_101787.3

NCBI GeneID

838512

NCBI Official Full Name

Nucleotide-diphospho-sugar transferases superfamily protein

NCBI Official Symbol

PARVUS

NCBI Official Synonym Symbols

ATGATL1; F18O14.2; F18O14_2; GALACTURONOSYLTRANSFERASE-LIKE 1; GAOLAOZHUANGREN 1;
GATL1; GLZ1

NCBI Protein Information

Nucleotide-diphospho-sugar transferases superfamily protein

NCBI Summary

The PARVUS/GLZ1 gene encodes a putative family 8 glycosyl transferase that contributes to xylan biosynthesis. Its gene expression shows good co-variance with the IRLX3 gene involved in secondary cell wall synthesis. PARVUS/GLZ1 is predicted to have galacturonosyltransferase activity and may be involved in the formation of the complex oligosaccharide sequence present at the reducing end of xylan. PARVUS is expressed in cells undergoing secondary wall thickening, and parvus mutants have thinner cell walls.

UniProt Gene Name

GATL1

UniProt Synonym Gene Names

GLZ1; PARVUS

UniProt Protein Name

Probable galacturonosyltransferase-like 1

UniProt Synonym Protein Names

Protein GAOLAOZHUANGREN 1; Protein PARVUS

UniProt Primary Accession

Q9LN68

UniProt Secondary Accession

Q8L5Z6; Q8LF94

UniProt Related Accession

Q9LN68

UniProt Comments

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(Yeast)/ 0.1 mg (Mammalian-Cell)

Required for the biosynthesis of the tetrasaccharide primer sequence, beta-D-Xyl-(1,3)-alpha-L-Rha-(1,2)-alpha-D-GalA-(1,4)-D-Xyl, located at the reducing end of glucuronoxylan. Might catalyze the transfer of the reducing Xyl residue onto a protein acceptor in the endoplasmic reticulum, which is then transported to the Golgi where the subsequent additions of sugar residues take place.

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