upregulated in SUGAR1dvsPLANT downregulated in SUGAR1dvsPLANT BspA type Leucine rich repeat region (6 copies) Serpin (serine protease inhibitor) aromatic amino acid family metabolic process Methyltransferase domain hydrolase activity, acting on glycosyl bonds Chitin binding Peritrophin-A domain serine family amino acid biosynthetic process Methyltransferase domain muscle cell differentiation alpha-amino acid metabolic process Methyltransferase domain striated muscle cell differentiation beta-glucosidase activity contractile fiber sarcomere vitamin binding pigment binding Lipocalin-like domain Carboxylesterase family cellular component assembly involved in morphogenesis triglyceride homeostasis lipid homeostasis Methyltransferase domain supramolecular fiber myofibril assembly muscle organ development extracellular space Methyltransferase domain muscle contraction supramolecular polymer supramolecular complex glucosidase activity acylglycerol homeostasis SET domain striated muscle cell development chitin binding cellular amino acid metabolic process muscle cell development regulat Glycosyl hydrolase family 1 actomyosin structure organization carboxylic ester hydrolase activity muscle structure development pyridoxal phosphate binding Cyclic nucleotide-binding domain hydrolase activity, hydrolyzing O-glycosyl compounds carbohydrate homeostasis response to oxidative stress Lipocalin / cytosolic fatty-acid binding protein family upregulated in SUGAR5dvsPLANT downregulated in SUGAR5dvsPLANT secondary active transmembrane CRAL/TRIO domain transporter activity Carboxylesterase family Glycosyl hydrolase family 1 Major Facilitator Superfamily

cellular component assembly involved in morphogenesis

structural constituent of chitin-based cuticle

supramolecular complex

actomyosin structure organization

Receptor family ligand binding region striated muscle cell development

myofibril assembly

EF hand structural constituent of cuticle

supramolecular fiber actin cytoskeleton flight

EF-hand domain muscle system process myosin complex

Insect cuticle protein EF hand muscle contraction

contractile fiber myofibril EF-hand domain pair

Chitin binding Peritrophin-A domain

muscle cell development

supramolecular polymer

supramolecular fiber organization

structural constituent of chitin-based larval cuticle

Transmembrane amino acid transporter proteir

sugar transmembrane transporter activity
Cytochrome P450 UDP-glucoronosyl and UDP-glucosyl transferase
monosaccharide transmembrane transport Cytochrome P450

glucose transmembrane transport

erase family 28 C-terminal domain Chitin binding Peritrophin-A domain monosaccharide transmembrane transporter activity Glutathione S-transferase, C-terminal domain carbohydrate transport Serpin (serine protease inhibitor) carbohydrate Protein-tyrosine phosphatase

hydrolase activity, acting on glycosyl bonds

ABC-2 type transporter extracellular space solute

Lipocalin-like domain Sugar (and other) transporter

glucose transmembrane transporter activity

Glutathione S-transferase, C-terminal domain Papain family cysteine protease

hexose transmembrane transporter activity
Lipocalin / cytosolic fatty-acid binding protein family
hexose transmembrane transport
BspA type Leucine rich repeat region (6 copies)
carbohydrate transmembrane transporter activity

carbohydrate transmembrane transport

active transmémbrane transporter activity

Leucine rich repeat hydrolase activity, Lectin C-type domain

carbohydratehydrolyzing O-glycosyl compounds

upregulated in SUGAR5dvsSUGAR1d

Cysteine-rich secretory protein family

chromosome, centromeric region

organelle assembly

microtubule-based process

cytoskeleton cilium centrosome

sodium cilium organization microtubule

microtubule cytoskeleton

ciliary plasm cilium assembly

axoneme

plasma membrane bounded cell projection assembly

kinetochore spindle midzone

cell projection assembly

axonemal dynein complex assembly

Cyclic nucleotide-binding domain

downregulated in SUGAR5dvsSUGAR1d

BspA type Leucine rich repeat region (6 copies)

Sugar (and other) transporter

Chitin binding Peritrophin-A domain Leucine rich repeat

Glutathione S-transferase, N-terminal domain

carbohydrate transmembrane transport

carbohydrate transmembrane transporter activity

hexose transmembrane transport Acyltransferase family

heart development glucose import Leucine Rich Repeat

monosaccharide transmembrane transporter activity

Glutathione S-transferase, C-terminal domain

Glutathione S-transferase, N-terminal domain

glucose transmembrane transporter activity

active transmembrane transporter activity

carbohydrate ABC-2 type transporter

carbohydrate transport solute Cytochrome P450

hexose transmembrane transporter activity Peptidase family M13

Glutathione S-transferase, C-terminal domain ABC transporter

monosaccharide transmembrane transport

sugar transmembrane transporter activity

ABC transporter transmembrane region secondary active transmembrane transporter activity

Major Facilitator Superfamily

carbohydrate glucose transmembrane transport UDP-glucoronosyl and UDP-glucosyl transferase

20 а

10

Count

30 а

a

а

50

Annotation

GO

Pfam

p.adjust

0.01

0.02

0.03 а

0.04 а