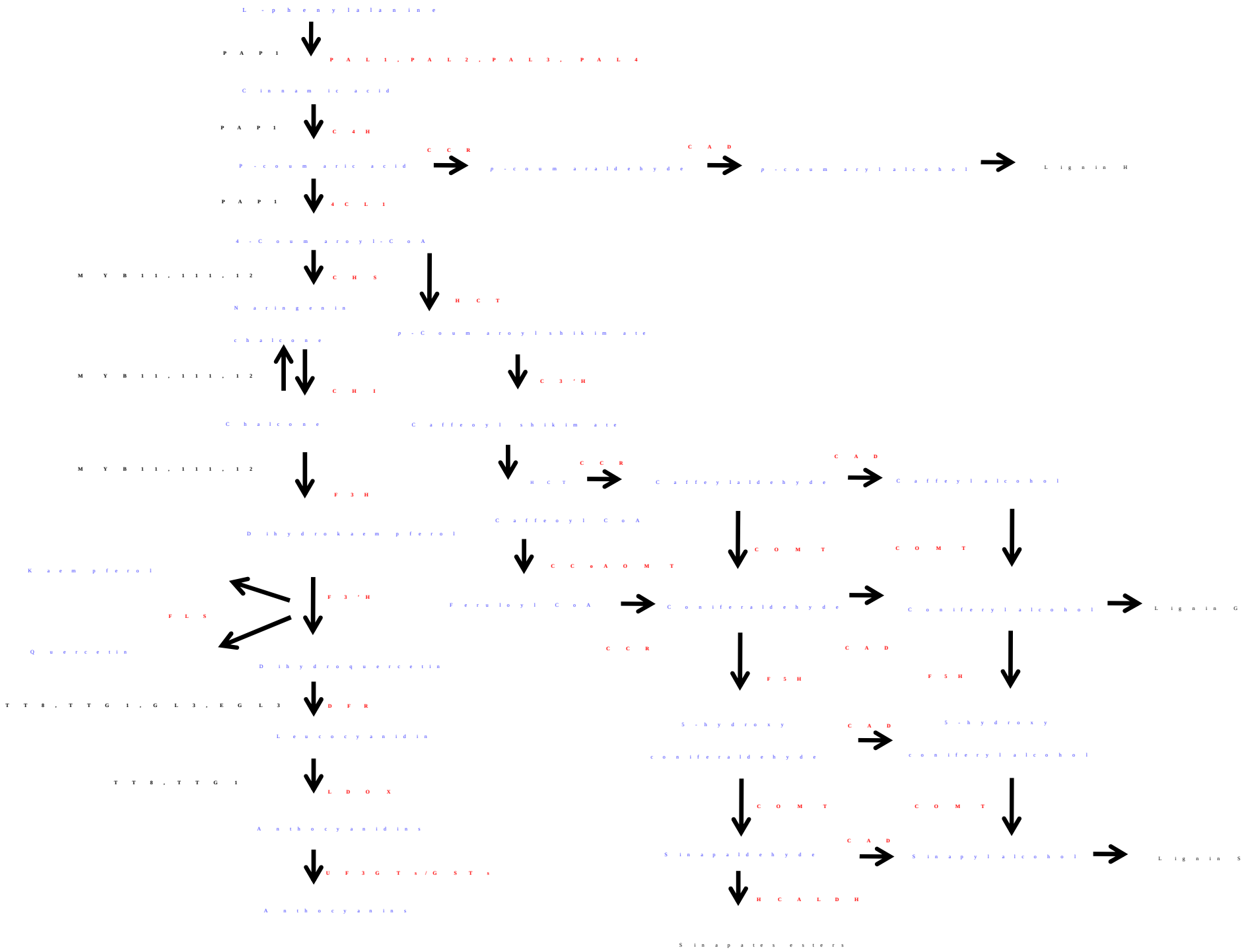
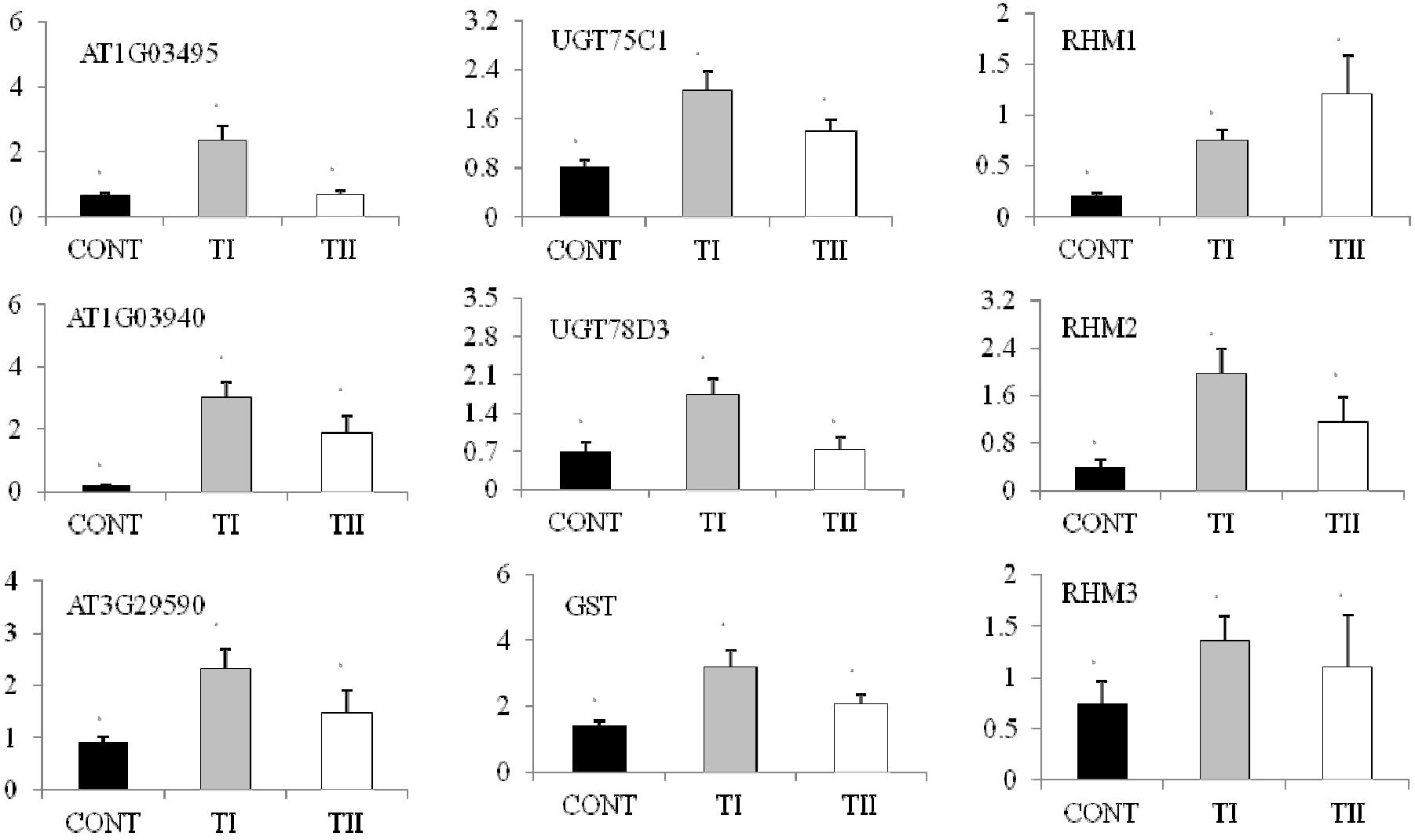
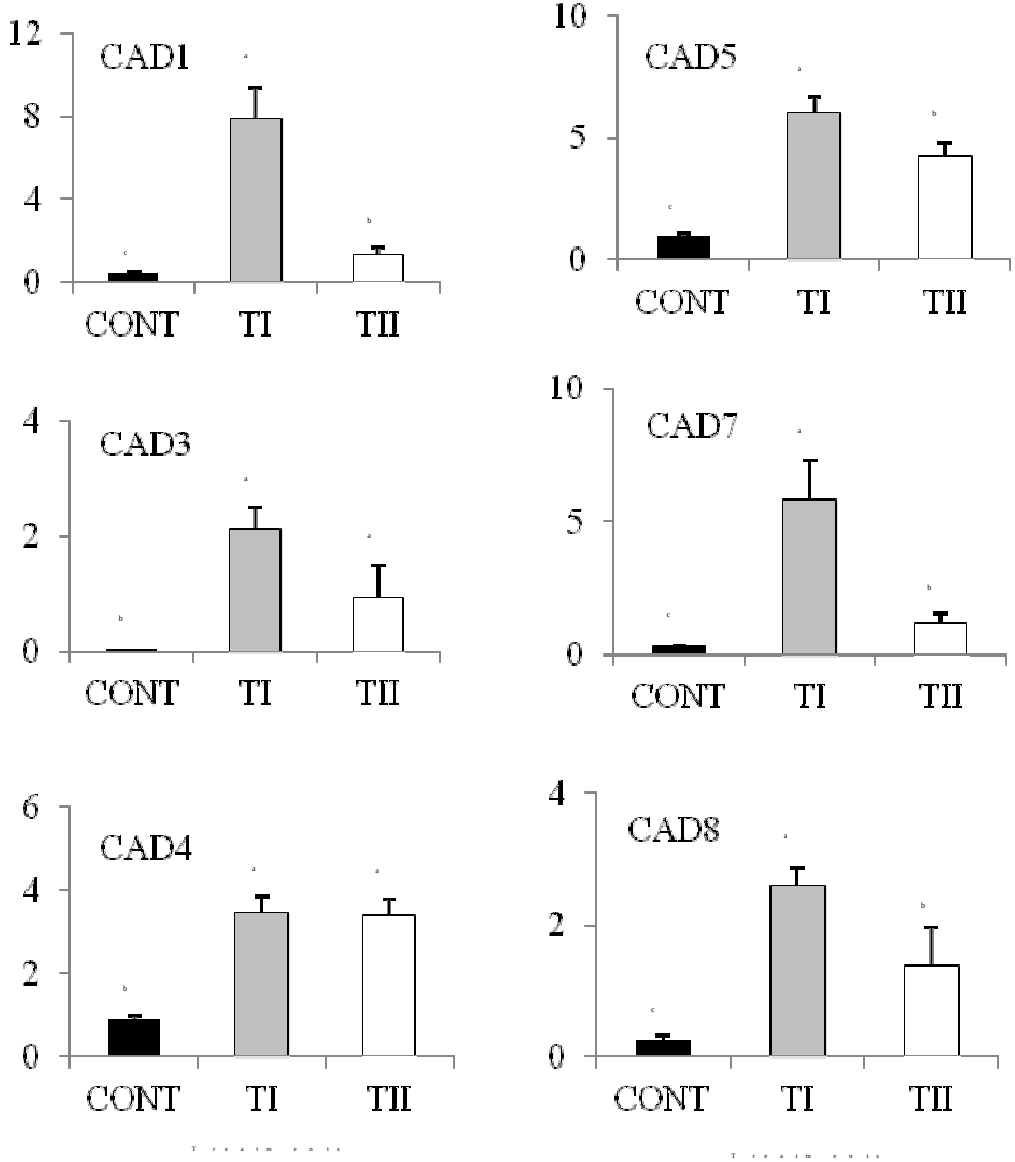
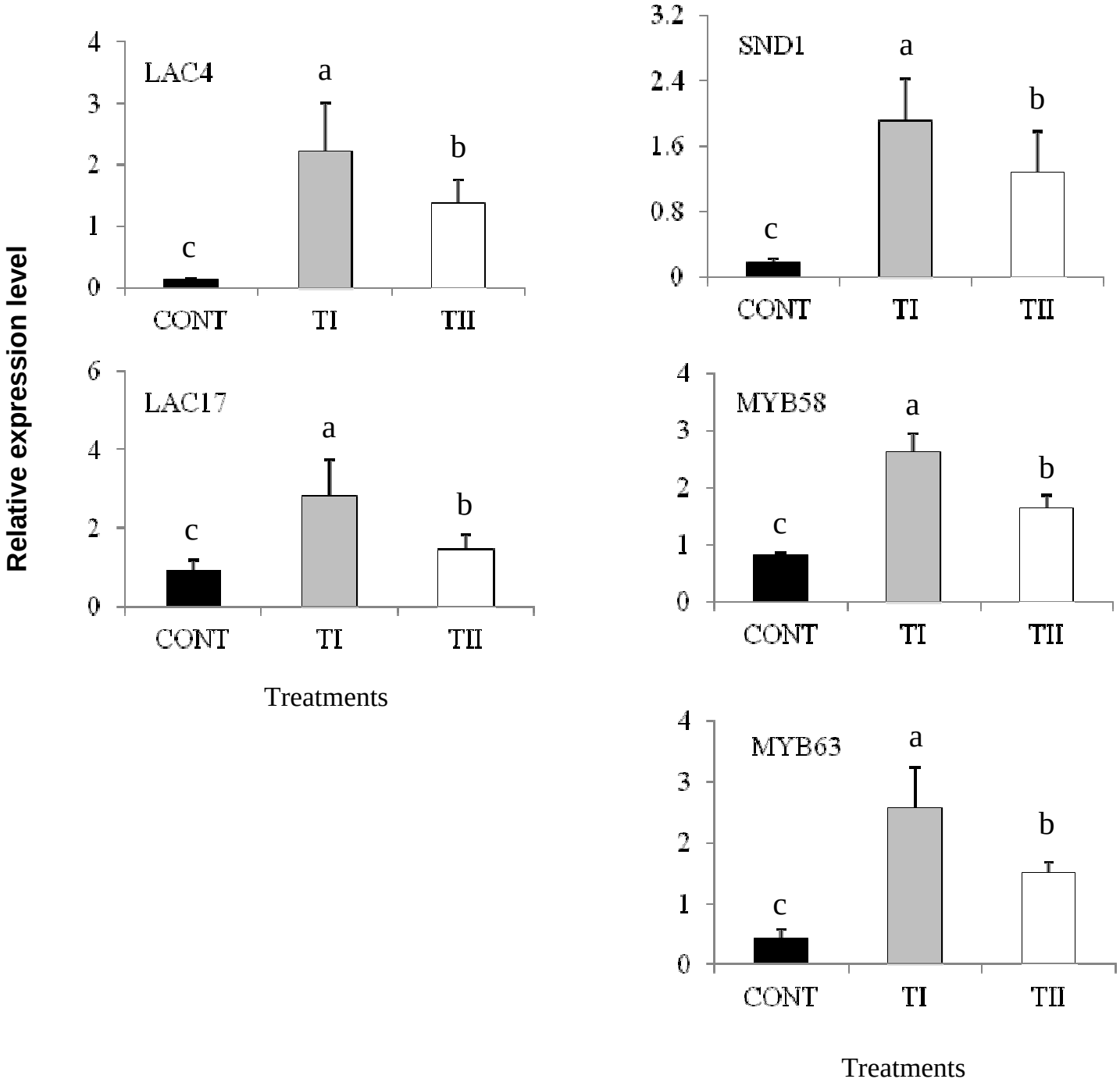

L-phenylalanine
PAP1
PAL1, PAL2, PAL3, PAL4
Cinnamic acid
PAP1
C4H
P-coum aric acid
CCR
p-coumaraldehyde
CAD
p-coumarylalcohol
Lignin H
PAP1
4CL1
4-Coumaroyl-CoA
MYB11, 111, 12
CHS
HCT
Naringenin
p-Coumaroylshikimate
chalcone
MYB11, 111, 12
CHI
C3'H
Chalcone
Caffeoyl shikimate
MYB11, 111, 12
F3H
HCT
CCR
Caffeylaldehyde
CAD
Caffeylalcohol
Dihydrokaempferol
Caffeoyl CoA
COMT
COMT
Kaempferol
CCoAOMT
F3'H
FLS
Feruloyl CoA
Coniferaldehyde
Coniferylalcohol
Lignin G
Quercetin
CCR
CAD
Dihydroquercetin
F5H
F5H
TT8, TTG1, GL3, EGL3
DFR
5-hydroxy
coniferaldehyde
CAD
5-hydroxy
coniferylalcohol
Leucocyanidin
TT8, TTG1
LDOX
COMT
COMT
Anthocyanidins
Sinapaldehyde
CAD
Sinapylalcohol
Lignin S
UF3GTs/GSTs
HCALDH
Anthocyanins
Sinapates esters


AT1G03495
UGT75C1
RHM1
AT1G03940
UGT78D3
RHM2
AT3G29590
GST
RHM3
CONT
TI
TII


CAD1
12
8
4
0
CONT
TI
TII
CAD5
10
5
0
CONT
TI
TII
CAD3
4
2
0
CONT
TI
TII
CAD7
10
5
0
CONT
TI
TII
CAD4
6
4
2
0
CONT
TI
TII
CAD8
4
2
0
CONT
TI
TII

Additional file **4**