Retrobiosynthetic study of salicylic acid in Catharanthus roseus cell suspension cultures

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Contents

Abbreviations

AcCN	acetonitrile
ADP	adenosine diphosphate
AQ	anthraquinones
AS	anthranilate synthase
ATP	adenosine triphosphate
BA	benzoic acid
C4H	cinnamate 4-hydroxylase
CC	column chromatography
CM	chorismate mutase
COSY	correlated spectroscopy
CPL	chorismate pyruvate-lyase
2,4-D	2,4-dichlorophenoxyacetic acid
DAD = PDA	photodiode array detector
2,3-DHBA	2,3-dihydroxybenzoic acid
2,3-DHBAG	2,3-dihydroxybenzoic acid glucoside
DMAPP	dimethylallyl diphosphate
DW	dry weight
DXR	1-deoxy-D-xylulose 5-phosphate reductoisomerase
DXS	1-deoxy-D-xylulose 5-phosphate synthase
E4P	erythrose-4-phosphate
EMP	Embden-Meyerhof-Parnas
EtOAc	ethylacetate
ESI	electrospray ionization
FAB	fast atom bombardment
FW	fresh weight
GA	gallic acid
GABA	γ-amino butyric acid
GC	gas chromatography
G10H	geraniol 10-hydroxylase
HBA	hydroxybenzoic acid
HMBC	heteronuclear multiple bond correlation
HMGR	3-hydroxy-3-methylglutaryl-CoA reductase
HMQC	heteronuclear multiple-quantum coherence
HR	hypersensitive reaction
IAA	indole-3-acetic acid
ICS	isochorismate synthase

IEC	ion exchange chromatography
IPL	isochorismate pyruvate-lyase
IPP	isopentenyl diphosphate
ISR	induced systemic resistance
JA	jasmonate
MECS	2*C*-methyl-D-erythritol 2,4-cyclodiphosphate synthase
MeJA	methyl jasmonate
MeOH	methanol
MEP	methyl-erythritol phosphate
MS	mass spectrometry
M&S	Murashige & Skoog
NAA	1-naphtaleneacetic acid
NMR	nuclear magnetic resonance
OMT	*O*-methyltransferase
ORCA	octadecanoid responsive *Catharanthus* AP2-domain
PAL	phenylalanine ammonia-lyase
PC	paper chromatography
PCA	principal component analysis
PEP	phosphoenolpyruvate
3PGAL	glyceraldehyde-3-phosphate
PP-ED	pentose phosphate-Entner-Doudoroff
PR protein	pathogenesis related protein
RP-HPLC	reversed phase high performance liquid chromatography
RT-PCR	reversed transcription-polymerase chain reaction
SA	salicylic acid
SAG	salicylic acid glucoside
SAR	systemic acquired resistance
SH	Schenk and Hildebrandt
STR	strictosidine synthase
TDC	tryptophan decarboxylase
TIA	terpenoid indole alkaloid
TLC	thin layer chromatography
TSP	trimethylsilyl propionic acid Na salt
UV	ultra violet