

花生根腐病生防菌 HSR-3 的鉴定及其防病促生作用分析

李莹 鞠倩 张霞 许曼琳 张初署 迟玉成 宋新颖*

(山东省花生研究所, 青岛 266100)

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附表 1 引物信息

Table S1 Primers used in this study

引物名称	引物序列	用途
Primer name	Sequence (5'-3')	Purpose
<i>ITS1</i>	TCCGTAGGTGAACCTGCGG	ITS 区扩增/测序
<i>ITS4</i>	TCCTCCGCTTATTGATATGC	
<i>EF-728</i>	CATCGAGAAGTTCGAGAAGG	
<i>EF-986</i>	TACTTGAAGGAACCCTTACC	<i>TEF1-α</i> 基因扩增/测序
RT- <i>BGN13</i> -F	GCAGCCCTCAACAAGGTG	RT-PCR <i>BGN13</i> 表达分析
RT- <i>BGN13</i> -R	AGAGCCAACGGGAACCAC	
RT- <i>BGN16</i> -F	ATGAGTCTCCTGGAATGG	RT-PCR <i>BGN16</i> 表达分析
RT- <i>BGN16</i> -R	GTTGGGATGTAGTTGAGGT	
RT- <i>EGL</i> -F	CTACTTCGGCCCCGGAGA	RT-PCR <i>EGL</i> 表达分析
RT- <i>EGL</i> -R	GGTGATGCTGACGAGGTTG	
RT- <i>ECH42</i> -F	AGTACCCTGCCGATGACA	RT-PCR <i>ECH42</i> 表达分析
RT- <i>ECH42</i> -R	TAGCCTGGAGCGTATTGC	
RT-Ta18S Rna-F	GGTGGAGTGATTTGTCTG	RT-PCR 内参基因表达分析
RT-Ta18S Rna-R	CTTACTAGGGATTCTCG	

附表 2 部分代表性差异代谢物

Table S2 Some representative metabolites

Index	log2_FC	Pvalue	FDR	VIP	MS2_name	RT	m/z
neg_M145T47_NEG	3.31	0.0003	0.0006	2.29	Oxoglutaric acid	47.92	145.01
neg_M240T177_NEG	1.15	0.0040	0.0067	1.19	Indole-3-carboxylic acid-O-sulphate	177.18	240.00
pos_M247T40_POS	1.29	0.0001	0.0003	1.12	Dimethylallylpyrophosphate	40.06	247.00
pos_M294T152_POS	5.19	0.0002	0.0003	1.09	Phenylalanyl-Gamma-glutamate	152.98	294.13
neg_M239T147_NEG	2.85	0.0048	0.0079	1.89	Lettucenin A	147.48	239.07
pos_M441T171_POS	2.25	0.0009	0.0017	1.31	3'-Hydroxy-HT2 toxin	171.57	441.22
pos_M310T247_POS	3.52	0.0018	0.0031	1.20	Palustrine	247.60	310.24
pos_M485T121_POS	2.19	0.0004	0.0008	1.23	Kanamycin	121.35	485.24
neg_M202T176_NEG	8.56	0.0005	0.0009	3.38	Cystathionine ketimine	176.20	202.03
neg_M167T155_NEG	1.98	0.0007	0.0013	1.53	Homogentisic acid	155.62	167.04
pos_M168T113_POS	1.81	0.0004	0.0007	1.36	Pyridoxal	113.93	168.07

neg_M240T71_NEG	3.53	0.0006	0.0011	2.02	Morin-5'-sulfonic acid	71.90	240.05
neg_M384T197_NEG	1.18	0.0001	0.0002	2.46	Indisulam	197.45	384.00
pos_M189T70_POS	1.80	0.0128	0.0199	1.04	HMBOA tetrahexose	70.65	189.16
neg_M150T555_NEG	1.29	0.0020	0.0034	1.00	Leukoaminochrome	555.43	150.06
neg_M212T44_NEG	3.56	0.0002	0.0004	1.91	Baclofen	44.76	212.06
pos_M182T166_POS	1.39	0.0033	0.0055	1.05	o-Tyrosine	166.90	182.08

注：FC 是处理组均值/对照组均值，index：代谢物编号，MS2_name：二级谱图匹配到的物质名称，RT (s)：保留时间，*m/z* (Da)：母离子质荷比，VIP (Variable importance for the projection) 值说明变量 (特征峰) 能解释 X 数据集和关联 Y 数据集的重要性。当某个变量的 VIP>1 时，说明该变量是重要的——通常将此作为潜在生物标记物的筛选条件之一

Note: FC = Treatment mean / control mean; index: metabolite ID; MS2_name: compound identified by MS/MS; RT (s): retention time; *m/z* (Da): precursor ion *m/z*; VIP: variable importance for projection. VIP > 1 indicates an important variable, commonly used as a criterion for screening potential biomarkers