

附表 1 次级代谢产物合成基因簇的预测结果

Annexed table 1 Prediction results of secondary metabolite biosynthesis gene clusters

菌株名称 Name of strain	基因簇类型 Types of gene clusters	基因簇数量 Number of gene clusters	基因簇的位置 Location of gene clusters
CNY01	NRPS	5	196,057-243,067, 365,443-430,855, 1,855,994-1,971,509, 2,085,883-2,223,395, 3,193,817-3,245,683
	Lanthipeptide-class-i	1	196,057-243,067
	transAT-PKS	2	1,855,994-1,971,509, 2,085,883-2,223,395
	PKS-like	1	1,855,994-1,971,509
	T3PKS	1	1,855,994-1,971,509
	betalactone	1	2,085,883-2,223,395
	NRP-metallophore	1	3,193,817-3,245,683
	sactipeptide	1	3,763,593-3,785,202
GQJK17	NRPS	5	194,385-241,422, 360,351-425,764, 1,855,981-1,980,602, 2,087,642-2,225,288, 3,373,569-3,425,434
	sactipeptide	1	194,385-241,422
	ranthipeptide	1	194,385-241,422
	transAT-PKS	2	1,855,981-1,980,602, 2,087,642-2,225,288
	PKS-like	1	1,855,981-1,980,602
	T3PKS	1	1,855,981-1,980,602
	RiPP-like	1	1,855,981-1,980,602
	betalactone	1	2,087,642-2,225,288
	NRP-metallophore	1	3,373,569-3,425,434
	BA59	NRPS	4
NRP-metallophore		1	1,230,390-1,282,256
transAT-PKS		2	2,320,080-2,461,584, 2,716,919-2,832,427
betalactone		1	2,320,080-2,461,584
T3PKS		1	2,716,919-2,832,427
PENSV20	NRPS	5	193,687-240,697, 358,988-424,401, 1,822,471-1,937,975, 2,020,342-2,162,075, 3,217,983-3,269,849
	sactipeptide	2	193,687-240,697, 3,782,313-3,803,922
	ranthipeptide	1	193,687-240,697
	transAT-PKS	2	1,822,471-1,937,975, 2,020,342-2,162,075
	PKS-like	1	1,822,471-1,937,975
	T3PKS	1	1,822,471-1,937,975
	betalactone	1	2,020,342-2,162,075
1942	NRP-metallophore	1	3,217,983-3,269,849
	NRPS	4	1,224,660-1,340,180, 1,430,287-1,571,947, 2,685,675-2,737,541, 3,990,450-4,055,863
	transAT-PKS	2	1,224,660-1,340,180, 1,430,287-1,571,947

	PKS-like	1	1,224,660-1,340,180
	T3PKS	1	1,224,660-1,340,180
	betalactone	1	1,430,287-1,571,947
	NRP-metallophore	1	2,685,675-2,737,541
	sactipeptide	1	3,247,943-3,269,552
	NRPS	5	360,339-425,751, 1,792,838-1,917,482, 2,019,615-2,156,837, 3,020,641-3,067,396, 3,197,525-3,249,391
	transAT-PKS	3	1,792,838-1,917,482, 2,019,615-2,156,837, 3,020,641-3,067,396
SRCM101359	PKS-like	1	1,792,838-1,917,482
	T3PKS	1	1,792,838-1,917,482
	RiPP-like	1	1,792,838-1,917,482
	betalactone	1	2,019,615-2,156,837
	NRP-metallophore	1	3,197,525-3,249,391
	NRPS	4	761,412-886,082, 954,217-1,091,212, 2,255,314-2,307,181, 3,561,223-3,626,635
	transAT-PKS	2	761,412-886,082, 954,217-1,091,212
	PKS-like	1	761,412-886,082
	T3PKS	1	761,412-886,082
NS2	RiPP-like	1	761,412-886,082
	betalactone	1	954,217-1,091,212
	NRP-metallophore	1	2,255,314-2,307,181
	RRE-containing	1	4,040,823-4,064,000
	LAP	1	4,040,823-4,064,000
	NRPS	5	246,040-293,050, 417,049-482,458, 1,810,050-1,925,583, 2,028,878-2,166,179, 3,199,687-3,251,554
	sactipeptide	1	246,040-293,050
	ranthipeptide	1	246,040-293,050
NX-12	transAT-PKS	2	1,810,050-1,925,583, 2,028,878-2,166,179
	PKS-like	1	1,810,050-1,925,583
	T3PKS	1	1,810,050-1,925,583
	betalactone	1	2,028,878-2,166,179
	NRP-metallophore	1	3,199,687-3,251,554
	NRPS	5	195,966-242,975, 366,670-432,081, 1,810,015-1,925,537, 2,043,133-2,180,812, 3,200,927-3,252,794
MBLB1156	Lanthipeptide-class-i	1	195,966-242,975
	transAT-PKS	2	1,810,015-1,925,537, 2,043,133-2,180,812
	PKS-like	1	1,810,015-1,925,537
MBLB1156	T3PKS	1	1,810,015-1,925,537
	betalactone	1	2,043,133-2,180,812
	NRP-metallophore	1	3,200,927-3,252,794
	sactipeptide	1	3,766,725-3,788,334