



碧云天生物技术/Beyotime Biotechnology
订货热线: 400-1683301或800-8283301
订货e-mail: order@beyotime.com
技术咨询: info@beyotime.com
网址: http://www.beyotime.com

pARE-luc (报告基因质粒)

产品编号	产品名称	包装
D2112-1μg	pARE-luc (报告基因质粒)	1μg
D2112-100μg	pARE-luc (报告基因质粒)	100μg

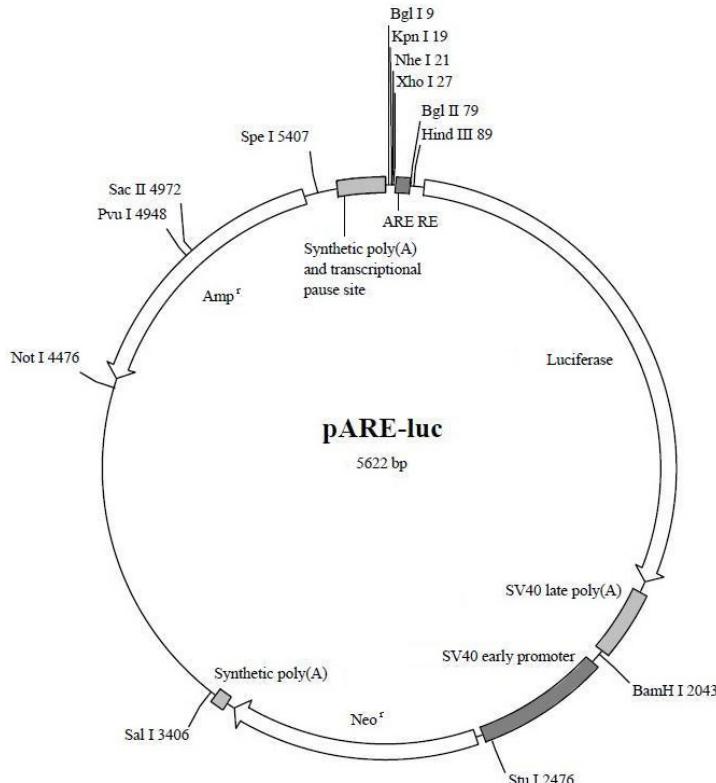
产品简介：

- pARE-luc (报告基因质粒)是碧云天自行研发的用于检测基于顺式作用元件antioxidant response element(ARE, 抗氧化响应元件)的转录活性水平的报告基因质粒。pARE-luc是以碧云天的pGL6质粒为模板，在其多克隆位点插入了2个ARE结合位点，可以高灵敏度地检测顺式作用元件ARE的激活水平，可以用于检测细胞的抗氧化水平或氧化应激状态。
- pGL6质粒模板是用于在哺乳动物细胞中进行萤火虫萤光素酶(firefly luciferase)报告基因检测的新一代质粒。该报告基因质粒比Promega公司的pGL3系列有了全面的改进，一方面对于luciferase的编码进行了改进，确保能更好地在哺乳动物细胞中进行表达，同时整个质粒中所有可以被预测出的可能的转录因子结合位点全部进行了适当的突变处理，在保持原有功能不变的情况下，使各种转录因子在质粒上的非特异性结合降到最低。
- 萤光素、萤光素酶、萤火虫萤光素酶和海肾萤光素酶也经常被称作荧光素、荧光素酶、萤火虫荧光素酶和海肾荧光素酶。

- pARE-luc质粒的主要信息如下：

Base pairs	5622
ARE response element (ARE RE)	32-77
luc2 reporter gene	123-1775
SV40 late poly(A) signal	1810-2031
SV40 early enhancer/promoter	2079-2497
Synthetic neomycin phosphotransferase (Neor) coding region	2522-3316
Synthetic poly(A) signal	3341-3389
Reporter Vector primer 4 (RVprimer4) binding region	3456-3475
Colel-derived plasmid replication origin	3713
Synthetic Beta-lactamase (Ampr) coding region	4504-5364
Synthetic poly(A) signal/transcriptional pause site	5469-5622
Reporter Vector primer 3 (RVprimer3) binding region	5571-5590

- pARE-luc质粒的图谱如下：



- pARE-luc的多克隆位点及ARE response element的详细图谱如下:

BglII KpnI NheI XhoI ARE response element
 1 GGCCTAACTG GCCGGTACCG CTAGCCTCGA GACTGAGGGT GACTCAGCAA
 CCGGATTGAC CGGCCATGGC GATCGGAGCT CTGACTCCCCA CTGAGTCGTT

BglII HindIII

51 AATCACTGAG GGTGACTTCAG CAAAATCAGA TCTGCAGAAG CTTGGCAATC
 TTAGTGACTC CCACTGAGTC GTTTTAGTCT AGACGTCTTC GAACCGTTAG

- pARE-luc中没有的酶切位点(Restriction enzymes that do not cut pARE-luc)包括:

Aat II	Afl II	Asc I	Ase I	Bsa I	BsaA I	BsiW I
BspM II	BssH II	Eco72 I	EcoR I	EcoR V	Mlu I	Nde I
Nru I	PflM I	Pme I	Pml I	Psp1406 I	PspA I	Rsr II
Sac I	Sma I	SnaB I	Spl I	Srf I	Tth111 I	Vsp I
Xcm I	Xma I					

- pARE-luc中的单酶切位点(Restriction enzymes that cut pARE-luc once)包括:

Sfi I	GGCCN,NNN`NGGCC 9	EcoN I	CCTNN`N,NNAGG 2997
Bgl I	GCCN,NNN`NGGC 9	BsIC I	TT`CG,AA 3392
Acc65 I	G`GTAC,C 15	BstB I	TT`CG,AA 3392
Asp718	G`GTAC,C 15	Sal I	G`TCGA,C 3406
Kpn I	G,GTAC`C 19	Afl III	A`CRYG,T 3656
Nhe I	G`CTAG,C 21	Apal I	G`TGCA,C 3970
PaeR7 I	C`TCGA,G 27	HgiE II	ACCNNNNNNNGGT -1/134235
Xho I	C`TCGA,G 27	Not I	GC`GGCC,GC 4476
Bgl II	A`GATC,T 79	BstX I	CCAN,NNNN`NTGG 4500
Hind III	A`AGCT,T 89	BstE II	G`GTNAC,C 4503
BsrG I	T`GTAC,A 614	Ahd I	GACNN,N`NNGTC 4578
Dra III	CAC,NNN`GTG 1270	Bsu36 I	CC`TNA,GG 4934
Gsu I	CTGGAG 21/19 1503	Pvu I	CG,AT`CG 4948
Bpm I	CTGGAG 22/20 1504	Sac II	CC,GC`GG 4972
Apo I	R`AATT,Y 1886	Bst1107 I	GTA TAC 5088
Mun I	C`AATT,G 1950	Xca I	GTA TAC 5088
BamH I	G`GATC,C 2043	Spe I	A`CTAG,T 5407
Stu I	AGG CCT 2476	BsmB I	CGTCTC 7/11 5420

- pARE-luc质粒中推荐使用的测序引物序列如下:

RVprimer3 (5571-5590):

CTA GCA AAA TAG GCT GTC CC

- pARE-luc的全序列信息请参考碧云天的网站上该质粒的信息。

包装清单 :

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D2112-1μg	pARE-luc (报告基因质粒)	1μg
D2112-100μg	pARE-luc (报告基因质粒)	100μg
—	说明书	1份

保存条件 :

-20°C保存。

注意事项 :

- 本质粒未经碧云天书面许可不得用于任何商业用途，也不得移交给订货人所在实验室外的任何个人或单位。
- 本产品仅限于专业人员的科学研究用，不得用于临床诊断或治疗，不得用于食品或药品，不得存放于普通住宅内。
- 为了您的安全和健康，请穿实验服并戴一次性手套操作。

使用说明 :

1. 首次使用1μg包装的本产品时请先取少量本质粒转化大肠杆菌，进行质粒小量、中量或大量抽提后再用于后续用途。抽提获得的质粒可以通过酶切电泳进行鉴定，或通过测序进行鉴定。
2. 100μg包装的本产品质粒浓度为0.1μg/μl，共1ml。可以直接用于酶切或者转染细胞。
3. pARE-luc可以用常规的细胞转染方法转染细胞。检测时可以采用碧云天的萤火虫萤光素酶报告基因检测试剂盒(RG005/RG006)或双萤光素酶报告基因检测试剂盒(RG027/RG028)。

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Version 2024.03.12