碧云天网站 微信公众号

碧云天生物技术/Beyotime Biotechnology
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pGL6-TA (报告基因质粒)

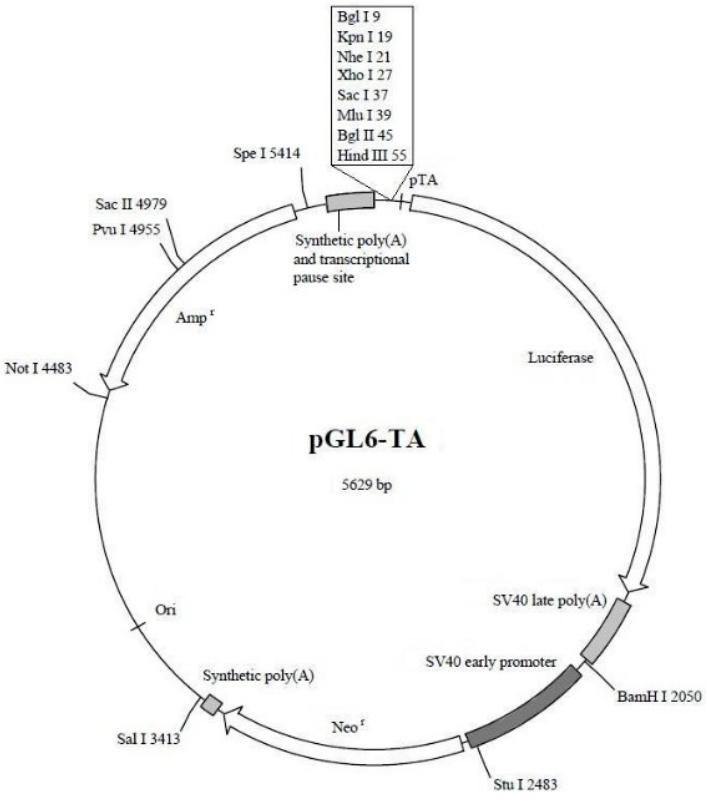
产品编号	产品名称	包装
D2105-1μg	pGL6-TA (报告基因质粒)	1μg
D2105-100μg	pGL6-TA (报告基因质粒)	100μg

产品简介:

- pGL6-TA (报告基因质粒)是碧云天自行研发的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，同时对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。
- pGL6-TA主要用于在其多克隆位点插入特定的启动子、增强子等调控元件研究该调控序列的基因转录调控活性。
- pGL6-TA和pGL6相比在多克隆位点和luc基因之间加入了一段minimal TA promoter，使luc基因的基础转录水平提高。
- pGL6-TA质粒的主要信息如下:

Base pairs	5629
Multiple cloning region	1-59
Minimal TA promoter (pTA)	66-88
luc2 reporter gene	120-1782
SV40 late poly(A) signal	1817-2038
SV40 early enhancer/promoter	2086-2504
Synthetic neomycin phosphotransferase (Neor) coding region	2529-3323
Synthetic poly(A) signal	3348-3396
Reporter Vector primer 4 (RVprimer4) binding region	3463-3482
ColE1-derived plasmid replication origin	3720
Synthetic Beta-lactamase (Ampr) coding region	4511-5371
Synthetic poly(A) signal/transcriptional pause site	5476-5629
Reporter Vector primer 3 (RVprimer3) binding region	5578-5597

- pGL6-TA质粒的图谱如下:



- pGL6-TA的多克隆位点的详细图谱如下：

```
   BglI         KpnI  NheI   XhoI   SacI  MluI   BglII
 1 GGCCTAACTG GCCGGTACCG CTAGCCTCGA GGAGCTCACG CGTAGATCTG
   CCGGATTGAC CGGCCATGGC GATCGGAGCT CCTCGAGTGC GCATCTAGAC

   HindIII        Minimal TA promoter
51 CAGAAGCTTA GACACTAGAG GGTATATAAT GGAAGCTCGA CTTCCAGCTT
   GTCTTCGAAT CTGTGATCTC CCATATATTA CCTTCGAGCT GAAGGTCGAA
```

- pGL6-TA中没有的酶切位点(Restriction enzymes that do not cut pGL6-TA)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	Nde I	Nru I
PflM I	Pme I	Pml I	Psp1406 I	PspA I	Rsr II	Sma I
SnaB I	Spl I	Srf I	Tth111 I			

- pGL6-TA中的单酶切位点(Restriction enzymes that cut pGL6-TA once)包括：

Sfi I	GGCCN,NNN`NGGCC	9	Stu I	AGG|CCT	2483
Bgl I	GCCN,NNN`NGGC	9	EcoN I	CCTNN`N,NNAGG	3004
Acc65 I	G`GTAC,C	15	BsiC I	TT`CG,AA	3399
Asp718	G`GTAC,C	15	BstB I	TT`CG,AA	3399
Kpn I	G,GTAC`C	19	Sal I	G`TCGA,C	3413
Nhe I	G`CTAG,C	21	ApaL I	G`TGCA,C	3977
PaeR7 I	C`TCGA,G	27	HgiE II	ACCNNNNNNGGT	-1/134242
Xho I	C`TCGA,G	27	Not I	GC`GGCC,GC	4483
Sac I	G,AGCT`C	37	BstX I	CCAN,NNNN`NTGG	4507
Mlu I	A`CGCG,T	39	BstE II	G`GTNAC,C	4510
Bgl II	A`GATC,T	45	Ahd I	GACNN,N`NNGTC	4585
Hind III	A`AGCT,T	55	Bsu36 I	CC`TNA,GG	4941
BsrG I	T`GTAC,A	621	Pvu I	CG,AT`CG	4955
Dra III	CAC,NNN`GTG	1277	Sac II	CC,GC`GG	4979
Gsu I	CTGGAG 21/19	1510	Bst1107 I	GTA|TAC	5095
Bpm I	CTGGAG 22/20	1511	Xca I	GTA|TAC	5095
Apo I	R`AATT,Y	1893	Spe I	A`CTAG,T	5414
Mun I	C`AATT,G	1957	BsmA I	GTCTC`/9	5426
BamH I	G`GATC,C	2050	BsmB I	CGTCTC 7/11	5427

- pGL6-TA质粒中推荐使用的测序引物序列如下：
  RVprimer3 (5578-5597):
  CTA GCA AAA TAG GCT GTC CC
- pGL6-TA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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D2105-1μg	pGL6-TA (报告基因质粒)	1μg
D2105-100μg	pGL6-TA (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. 用于插入调控序列：在多克隆位点选取适当的酶切位点，经酶切处理后连入适当的基因转录调控序列。pGL6-TA也可以用作报告基因检测时的阴性对照。
4. pGL6-TA质粒以及以此质粒为模板构建的质粒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)。

使用本产品的文献：

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