

Datasheet of GLuc-ON™ GR Transcriptional Response Element (TRE) Clone (TR111)

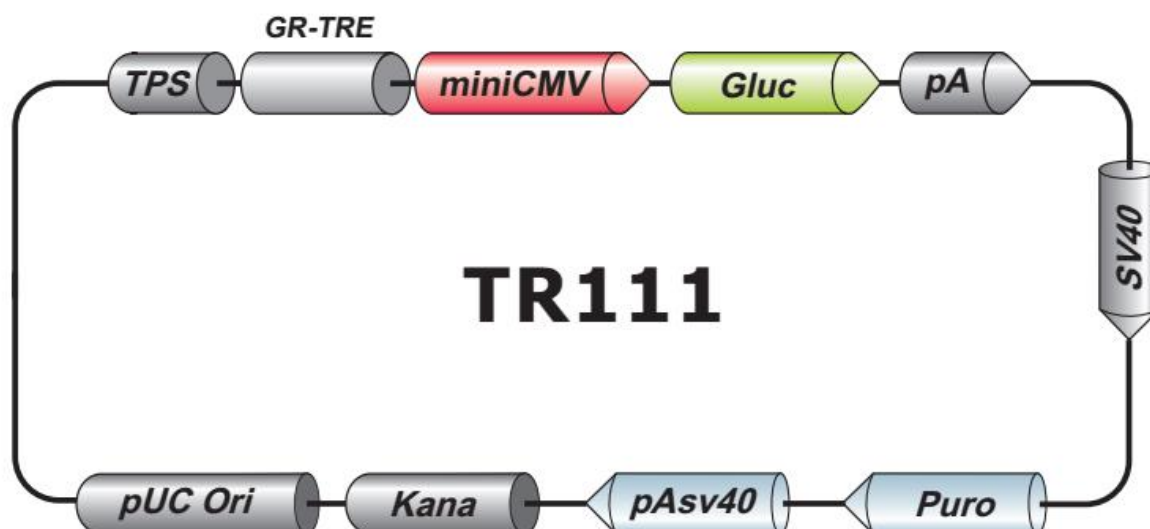


Figure 1. GLuc-ON™ GR Transcriptional Response Element (TRE) Clone (TR111)

Cat. No	TR111
Description	GeneCopoeia's GLuc-ON™ GR transcriptional response element (TRE) clone enables analysis of gene activation in response to glucocorticoid receptor activity. The glucocorticoid receptor is a transcription factor that is transported to the nucleus in response to steroid hormone binding, and is involved in many physiological processes, such as stress, lipid metabolism, and inflammation. The GR transcriptional TRE clone contains a minimal promoter and tandem repeats of the GR transcriptional response element upstream of a secreted Gaussia luciferase reporter gene. The number of response elements, as well as the intervening sequence between the elements has been optimized to maximize the sensitivity and signal to noise ratio.
Delivery	500ng/μL × 40μL
Storage Conditions	-20°C
QC	• Functional validation in common cell line • Full sequence verification • Restriction Digestion

Validation Data

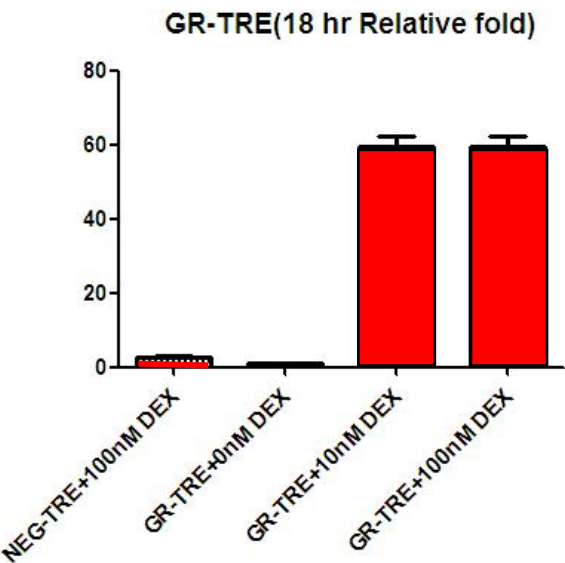


Figure 2 Activation of the GLuc-ON™ GR TRE by forskolin. 293T cells were transfected with a negative control clone or the GLuc-ON™ GR TRE clone. Transfected cells were incubated for 24 hours, followed by 18 hours of treatment with DEX. A Gaussia Luciferase assay was performed, and transcriptional response activity values are expressed as luminance fold activation.

Restriction Enzyme Information for TR111

Table 1. Restriction Enzymes That Do Not Cleave TR111

AfeI	AgeI	AscI	BbvCI	BlpI	BsaAI	BstXI	BstZ17I
Bsu36I	BtrI	EcoRV	FspI	MluI	NdeI	PacI	PmeI
PmlI	PpuMI	PshAI	PvuII	SanDI	SapI	SbfI	SgrAI
SnaBI	SpeI	SrfI	Swal				

Table 2. Restriction Enzymes That Cleave TR111 Once

AarI	619	AasI	4561	Acc65I	663	AccI	1226	AccIII	2202	AcII	209	AcuI	4121	Adel	2660
AflII	343	AflIII	4663	AhdI	1191	Aor13HI	2202	AseI	3744	AsiSI	3545	Asp718I	663	AspA2I	2012
AspEI	1191	AspI	2131	AssI	554	AsuII	458	AvrII	2012	BaeI	2770	BamHI	876	BauI	4490
BciVI	4465	BclI	2063	BfrI	343	BfuI	4465	BlnI	2012	BmcAI	554	BmeRI	1191	Bpu14I	458
Bsa29I	547	BsaBI	919	BsaI	2563	Bse8I	919	BseAI	2202	BseCI	547	BseII	919	BsePI	2544
BseRI	2008	BshVI	547	BsiWI	2145	Bso31I	2563	Bsp119I	458	Bsp13I	2202	BspDI	547	BspEI	2202
BspHI	3069	BspT104I	458	BspTI	343	BssHII	2544	BssSI	4490	Bst2BI	4490	BstAFI	343	BstBI	458
BstEII	2223	BstENI	3457	BstPI	2223	Bsu15I	547	BsuI	4465	CciI	3069	CciNI	1448	Cfr9I	2033
Clal	547	CpoI	2205	CspI	2205	DraI	2969	DraIII	2660	DrdI	4561	Dril	1191	DseDI	4561
Eam1105I	1191	Ecl136II	672	Eco31I	2563	Eco53kl	672	Eco57I	4121	Eco91I	2223	EcoICRI	672	EcoNI	3457
EcoO65I	2223	EcoRI	483	FbaI	2063	FblI	1226	FseI	2767	HindIII	800	HpaI	2908	Kpn2I	2202
KpnI	667	KroI	2763	Ksp22I	2063	KspAI	2908	MfeI	2917	MroI	2202	MroNI	2763	MspCI	343
MunI	2917	NaeI	2765	NgoMIV	2763	NotI	1448	NspV	458	Paer7I	1454	PagI	3069	PasI	2138
Paul	2544	PciI	4663	PdII	2765	Pfl23II	2145	PfIFI	2131	PfoI	2564	PscI	4663	PshBI	3744
Psp124BI	674	Psp1406I	209	PspEI	2223	PspLI	2145	PspXI	1454	PstI	3010	PsyI	2131	PteI	2544
RcaI	3069	RgaI	3545	RigI	2767	Rsr2I	2205	RsrII	2205	SacI	674	SalI	1225	Scal	554
SfaAI	3545	Sfr274I	1454	SfuI	458	Sgfi	3545	Slal	1454	SmaI	2035	SspI	3470	SstI	674
StrI	1454	TspMI	2033	Tth111I	2131	Vha464I	343	VspI	3744	XagI	3457	XcmI	1687	XhoI	1454
XmaI	2033	XmaII	2012	XmII	1226	Zrml	554								

Table 3. Restriction Enzymes That Cleave TR111 Twice

Acc36I	619	Acc36I	1361	AccB7I	479	AccB7I	3808	Ajul	462	Ajul	3573	Alw44I	1131	Alw44I	4349
AlwNI	1103	AlwNI	4254	Apal	356	Apal	3971	ApaLI	1131	ApaLI	4349	Asp700I	1150	Asp700I	1474
AsuNHI	44	AsuNHI	676	Ball	982	Ball	2464	BasI	479	BasI	3808	BbsI	134	BbsI	965
Bcgl	71	Bcgl	2530	BfuAI	619	BfuAI	1361	BglII	475	BglII	781	BmtI	48	BmtI	680
Bpil	134	Bpil	965	BpII	1947	BpII	1979	Bpu10I	668	Bpu10I	3562	BpuAI	134	BpuAI	965
BpvUI	1223	BpvUI	3545	BsaXI	914	BsaXI	2467	BsmBI	2481	BsmBI	3561	Bsp120I	352	Bsp120I	3967
Bsp1407I	440	Bsp1407I	1588	Bsp19I	887	Bsp19I	1919	Bsp68I	994	Bsp68I	3202	BspMI	619	BspMI	1361
BspOI	48	BspOI	680	BsrGI	440	BsrGI	1588	BstAUI	440	BstAUI	1588	BstV2I	134	BstV2I	965
BtgZI	906	BtgZI	1263	BtuMI	994	BtuMI	3202	BveI	619	BveI	1361	CaiI	1103	CaiI	4254
Cfr42I	1020	Cfr42I	2303	CsiI	1779	CsiI	2656	DinI	2298	DinI	2429	Drall	353	Drall	3968
Eco147I	2011	Eco147I	2420	EcoO109I	353	EcoO109I	3968	EgeI	2298	EgeI	2429	EheI	2298	EheI	2429
Esp3I	2481	Esp3I	3561	HincII	1227	HincII	2908	HindII	1227	HindII	2908	KasI	2296	KasI	2427
KspI	1020	KspI	2303	MabI	1779	MabI	2656	MIsI	982	MIsI	2464	MluNI	982	MluNI	2464
Mly113I	2297	Mly113I	2428	MroXI	1150	MroXI	1474	MscI	982	MscI	2464	MslI	524	MslI	925
Msp20I	982	Msp20I	2464	MvrI	1223	MvrI	3545	NarI	2297	NarI	2428	NcoI	887	NcoI	1919
NheI	44	NheI	676	NruI	994	NruI	3202	PceI	2011	PceI	2420	Pdml	1150	Pdml	1474
PfIMI	479	PfIMI	3808	Ple19I	1223	Ple19I	3545	PluTI	2300	PluTI	2431	PspOMI	352	PspOMI	3967
PstNI	1103	PstNI	4254	PvuI	1223	PvuI	3545	RruI	994	RruI	3202	RseI	524	RseI	925
SacII	1020	SacII	2303	SexAI	1779	SexAI	2656	SfiI	657	SfiI	794	SfoI	2298	SfoI	2429
Sfr303I	1020	Sfr303I	2303	SgrBI	1020	SgrBI	2303	SmiMI	524	SmiMI	925	SseBI	2011	SseBI	2420
SspDI	2296	SspDI	2427	StuI	2011	StuI	2420	Van91I	479	Van91I	3808	VneI	1131	VneI	4349
XbaI	778	XbaI	1466	XmnI	1150	XmnI	1474								

Table 4. Restriction Enzymes That Cleave TR111 Three times

AanI	427	AanI	1605	AanI	2888	AatII	66	AatII	2135	AatII	2633	Avall	2205	Avall	2315
Avall	2647	Bfml	3006	Bfml	4207	Bfml	4398	Bme18I	2205	Bme18I	2315	Bme18I	2647	Bmrl	141
Bmrl	611	Bmrl	1891	Bmul	141	Bmul	611	Bmul	1891	Bpml	1069	Bpml	1288	Bpml	2587
Bse3DI	421	Bse3DI	1613	Bse3DI	3043	BseMI	421	BseMI	1613	BseMI	3043	BsrDI	421	BsrDI	1613
BsrDI	3043	Bst6I	329	Bst6I	2248	Bst6I	3358	BstAPI	1757	BstAPI	1829	BstAPI	2660	BstSFI	3006
BstSFI	4207	BstSFI	4398	Eam1104I	329	Eam1104I	2248	Eam1104I	3358	EarI	329	EarI	2248	EarI	3358
Eco47I	2205	Eco47I	2315	Eco47I	2647	Gsul	1069	Gsul	1288	Gsul	2587	Psil	427	Psil	1605
Psil	2888	Psrl	725	Psrl	758	Psrl	791	Sfcl	3006	Sfcl	4207	Sfcl	4398	TaqII	2107
TaqII	2731	TaqII	3799	VpaK11BI	2205	VpaK11BI	2315	VpaK11BI	2647	Zral	64	Zral	2133	Zral	2631