Datasheet of GLuc-ON™ PPAR Transcriptional Response Element (TRE) Clone (TR112)

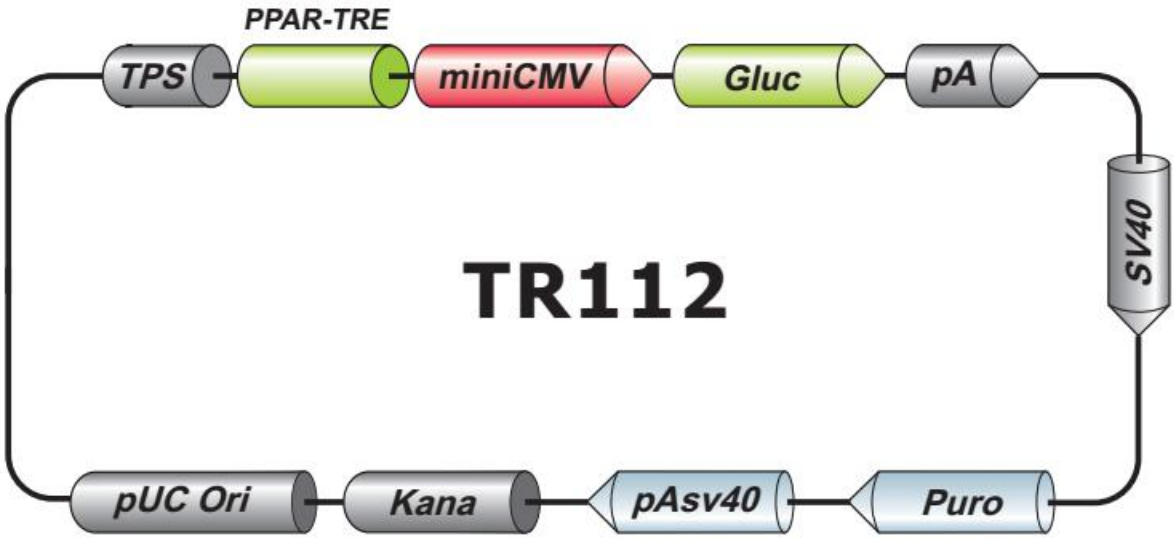

Figure 1. GLuc-ON™ PPAR Transcriptional Response Element (TRE) Clone (TR112)

Cat. No	TR112
Description	GeneCopoeia 's GLuc-ON™ PPAR transcriptional response element (TRE) clone enables analysis of transcriptional activity of peroxisome proliferator-activated receptors (PPARs). PPARs are a family of three nucleus-localized transcription factors-PPAR α , PPAR β / δ , and PPAR ɣ that lead to peroxisome proliferation in response to lipid ligands. PPARs are important players in treatments of various diseases, such as obesity and diabetes. The PPAR transcriptional TRE clone contains a minimal promoter and tandem repeats of the PPAR transcriptional response element upstream of a secreted Gaussia luciferase reporter gene. The number of response elements, as well as the intervening sequence between theelements has been optimized to maximize the sensitivity and signal to noise ratio.
Delivery	500ng/μL × 40μL
Storage Conditions	-20℃
QC	• Functional validation in common cell line • Full sequence verification • Restriction Digestion

Validation Data

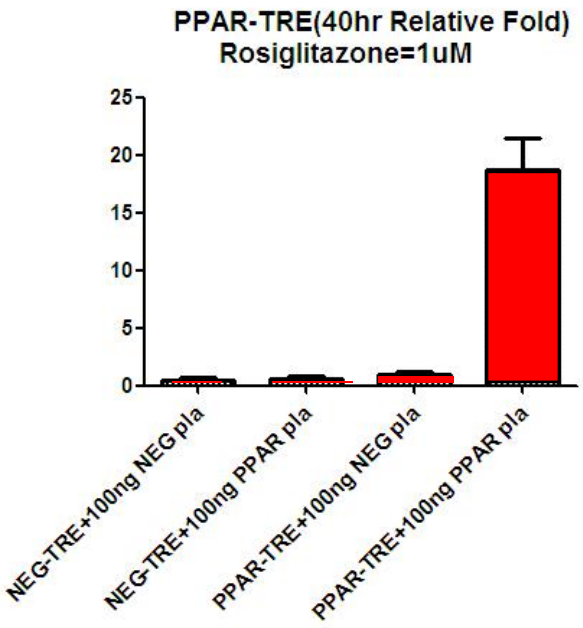

Figure 2. Activation of the GLuc-ON™ PPAR TRE by exogenous expression of PPAR. 293T cells were were co-transfected with PPAR TRE clone + PPAR expression clone, PPAR TRE clone + negative expression clone, negative control clone + PPAR expression clone, or negative TRE clone + negative expression clone. Transfected cells were incubated for 40 hours. A Gaussia Luciferase assay was performed, and transcriptional response activity values are expressed as luminance fold activation.

Restriction Enzyme Information for TR112

Table 1. Restriction Enzymes That Do Not Cleave TR112

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

Table 2. Restriction Enzymes That Cleave TR112 Once

AarI	619	AasI	4678	Acc65I	663	AccI	1343	AccIII	2319	AclI	209
AflII	343	AflIII	4780	AhdI	1308	AloI	1033	Aor13HI	2319	AseI	3861
AspA2I	2129	AspEI	1308	AspI	2248	AssI	554	AsuII	458	AvrII	2129
BauI	4607	BciVI	4582	BclI	2180	BfrI	343	BfuI	4582	BlnI	2129
Bpu14I	458	Bsa29I	547	BsaBI	1036	BsaI	2680	Bse8I	1036	BseAI	2319
BsePI	2661	BseRI	2125	BshVI	547	BsiWI	2262	Bso31I	2680	Bsp119I	458
BspEI	2319	BspHI	3186	BspT104I	458	BspTI	343	BssHII	2661	BssSI	4607
BstBI	458	BstEII	2340	BstENI	3574	BstPI	2340	Bsu15I	547	BsuI	4582
Cfr9I	2150	ClaI	547	CpoI	2322	CspI	2322	DraI	3086	DraIII	2777
DseDI	4678	Eam1105I	1308	Ecl136II	672	Eco31I	2680	Eco53kI	672	Eco57I	4238
EcoNI	3574	EcoO65I	2340	EcoRI	483	FbaI	2180	FblI	1343	FseI	2884
Kpn2I	2319	KpnI	667	KroI	2880	Ksp22I	2180	KspAI	3025	MfeI	3034
MspCI	343	MunI	3034	NaeI	2882	NgoMIV	2880	NotI	1565	NspV	458
PasI	2255	PauI	2661	PciI	4780	PdiI	2882	Pfl23II	2262	PflFI	2248
PshBI	3861	Psp124BI	674	Psp1406I	209	PspEI	2340	PspLI	2262	PspXI	1571
PteI	2661	RcaI	3186	RgaI	3662	RigI	2884	Rsr2I	2322	RsrII	2322
ScaI	554	SfaAI	3662	Sfr274I	1571	SfuI	458	SgfI	3662	SlaI	1571
SstI	674	StrI	1571	TspMI	2150	Tth111I	2248	Vha464I	343	VspI	3861
XcmI	1804	XhoI	1571	XmaI	2150	XmaJI	2129	XmiI	1343	ZrmI	554

AclI	209	AcuI	4238	AdeI	2777						
AseI	3861	AsiSI	3662	Asp718I	663						
AvrII	2129	BaeI	2887	BamHI	993						
BlnI	2129	BmcAI	554	BmeRI	1308						
BseAI	2319	BseCI	547	BseJI	1036						
Bsp119I	458	Bsp13I	2319	BspDI	547						
BssSI	4607	Bst2BI	4607	BstAFI	343						
BsuI	4582	CciI	3186	CciNI	1565						
DraIII	2777	DrdI	4678	DriI	1308						
Eco57I	4238	Eco91I	2340	EcoICRI	672						
FseI	2884	HindIII	917	HpaI	3025						
MfeI	3034	MroI	2319	MroNI	2880						
NspV	458	PaeR7I	1571	PagI	3186						
PflFI	2248	PfoI	2681	PscI	4780						
PspXI	1571	PstI	3127	PsyI	2248						
RsrII	2322	SacI	674	SalI	1342						
SlaI	1571	SmaI	2152	SspI	3587						
VspI	3861	XagI	3574	XbaI	1583						

Table 3. Restriction Enzymes That Cleave TR112 Twice

Acc36I	619	Acc36I	1478	AccB7I	479	AccB7I	3925	AjuI	462	AjuI	3690	Alw44I	1248	Alw44I	4466
AlwNI	1220	AlwNI	4371	ApaI	356	ApaI	4088	ApaLI	1248	ApaLI	4466	Asp700I	1267	Asp700I	1591
AsuNHI	44	AsuNHI	676	BalI	1099	BalI	2581	BasI	479	BasI	3925	BbsI	134	BbsI	1082
BcgI	71	BcgI	2647	BfuAI	619	BfuAI	1478	BglII	475	BglII	898	BmtI	48	BmtI	680
BpiI	134	BpiI	1082	BplI	2064	BplI	2096	Bpu10I	668	Bpu10I	3679	BpuAI	134	BpuAI	1082
BpvUI	1340	BpvUI	3662	BsaXI	1031	BsaXI	2584	BsmBI	2598	BsmBI	3678	Bsp120I	352	Bsp120I	4084
Bsp1407I	440	Bsp1407I1	705	Bsp19I	1004	Bsp19I	2036	Bsp68I	1111	Bsp68I	3319	BspMI	619	BspMI	1478
BspOI	48	BspOI	680	BsrGI	440	BsrGI	1705	BstAUI	440	BstAUI	1705	BstV2I	134	BstV2I	1082
BtgZI	1023	BtgZI	1380	BtuMI	1111	BtuMI	3319	BveI	619	BveI	1478	CaiI	1220	CaiI	4371
Cfr42I	1137	Cfr42I	2420	CsiI	1896	CsiI	2773	DinI	2415	DinI	2546	DraII	353	DraII	4085
Eco147I	2128	Eco147I	2537	EcoO109I	353	EcoO109I	4085	EgeI	2415	EgeI	2546	EheI	2415	EheI	2546
Esp3I	2598	Esp3I	3678	HincII	1344	HincII	3025	HindII	1344	HindII	3025	KasI	2413	KasI	2544
KspI	1137	KspI	2420	MabI	1896	MabI	2773	MlsI	1099	MlsI	2581	MluNI	1099	MluNI	2581
Mly113I	2414	Mly113I	2545	MroXI	1267	MroXI	1591	MscI	1099	MscI	2581	MslI	524	MslI	1042
Msp20I	1099	Msp20I	2581	MvrI	1340	MvrI	3662	NarI	2414	NarI	2545	NcoI	1004	NcoI	2036
NheI	44	NheI	676	NruI	1111	NruI	3319	PceI	2128	PceI	2537	PdmI	1267	PdmI	1591
PflMI	479	PflMI	3925	Ple19I	1340	Ple19I	3662	PluTI	2417	PluTI	2548	PspOMI	352	PspOMI	4084
PstNI	1220	PstNI	4371	PvuI	1340	PvuI	3662	RruI	1111	RruI	3319	RseI	524	RseI	1042
SacII	1137	SacII	2420	SexAI	1896	SexAI	2773	SfiI	657	SfiI	911	SfoI	2415	SfoI	2546
Sfr303I	1137	Sfr303I	2420	SgrBI	1137	SgrBI	2420	SmiMI	524	SmiMI	1042	SseBI	2128	SseBI	2537
SspDI	2413	SspDI	2544	StuI	2128	StuI	2537	Van91I	479	Van91I	3925	VneI	1248	VneI	4466
XmnI	1267	XmnI	1591												

Table 4. Restriction Enzymes That Cleave TR112 Three times

AanI	427	AanI	1722	AanI	3005	AatII	66	AatII	2252	AatII	2750	BfmI	3123	BfmI	4324
BfmI	4515	BmrI	141	BmrI	611	BmrI	2008	BmuI	141	BmuI	611	BmuI	2008	BpmI	1186
BpmI	1405	BpmI	2704	Bse3DI	421	Bse3DI	1730	Bse3DI	3160	BseMI	421	BseMI	1730	BseMI	3160
BsrDI	421	BsrDI	1730	BsrDI	3160	Bst6I	329	Bst6I	2365	Bst6I	3475	BstAPI	1874	BstAPI	1946
BstAPI	2777	BstSFI	3123	BstSFI	4324	BstSFI	4515	Eam1104I	329	Eam1104I	2365	Eam1104I	3475	EarI	329
EarI	2365	EarI	3475	GsuI	1186	GsuI	1405	GsuI	2704	PsiI	427	PsiI	1722	PsiI	3005
SfcI	3123	SfcI	4324	SfcI	4515	TaqII	2224	TaqII	2848	TaqII	3916	ZraI	64	ZraI	2250
ZraI	2748														