Datasheet of GLuc-ON™ LxRa Transcriptional Response Element (TRE) Clone (TR114)

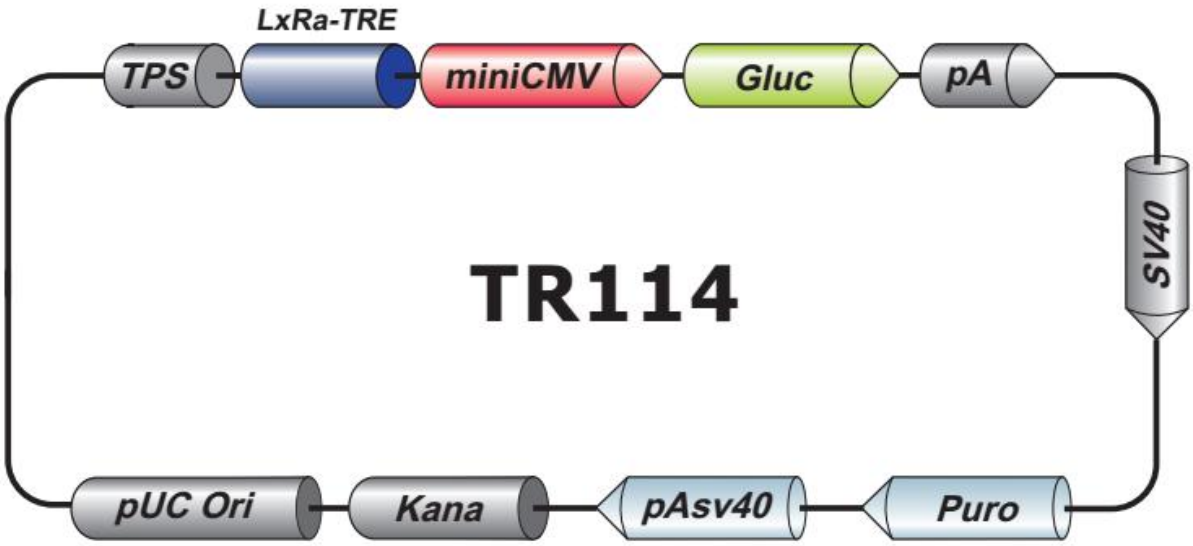

Figure 1. GLuc-ON™ LxRa Transcriptional Response Element (TRE) Clone (TR114)

Cat. No	TR114
Description	GeneCopoeia 's GLuc-ON™ LxRa transcriptional response element (TRE) clone enables analysis of the transcriptional activity of liver X receptor (LXR). LXRs comprise 2 members: LXRa and LXRb. LXRs are nucleus-localized transcription factors that bind oxidized forms of cholesterol, and are critical players in regulation of cholesterol levels. The LxRa transcriptional TRE clone contains a minimal promoter and tandem repeats of the LxRa 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

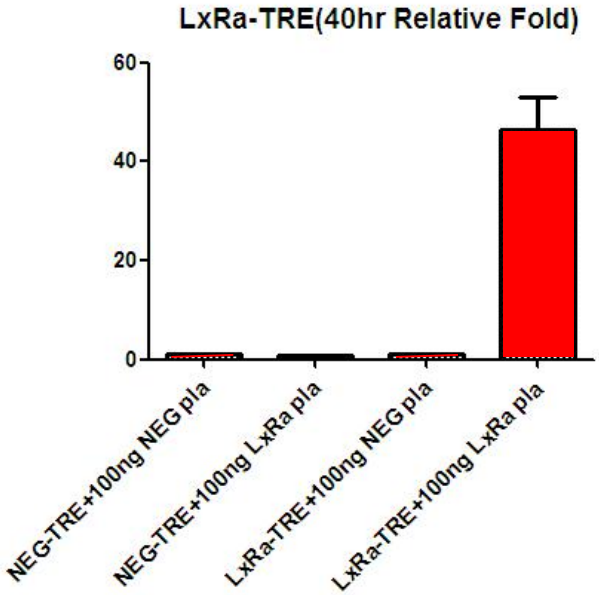

Figure 2. Activation of the GLuc-ON™ LXRa TRE by exogenous expression of LxRa. 293T cells were were co-transfected with LXRa TRE clone + LXRa expression clone, LXRa TRE clone + negative expression clone, negative control clone + LXRa expression clone, or negative TRE clone + negative expression clone. 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 TR114

Table 1. Restriction Enzymes That Do Not Cleave TR114

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

Table 2. Restriction Enzymes That Cleave TR114 Once

AarI	619	AasI	4606	Acc65I	663	AccI	1271	AccIII	2247	AclI	209	AcuI	4166	AdeI	2705
AflII	343	AflIII	4708	AhdI	1236	AloI	961	Aor13HI	2247	AseI	3789	AsiSI	3590	Asp718I	663
AspA2I	2057	AspEI	1236	AspI	2176	AssI	554	AsuII	458	AvrII	2057	BaeI	2815	BamHI	921
BauI	4535	BciVI	4510	BclI	2108	BfrI	343	BfuI	4510	BlnI	2057	BmcAI	554	BmeRI	1236
Bpu14I	458	Bsa29I	547	BsaBI	964	BsaI	2608	Bse8I	964	BseAI	2247	BseCI	547	BseJI	964
BsePI	2589	BseRI	2053	BshVI	547	BsiWI	2190	Bso31I	2608	Bsp119I	458	Bsp13I	2247	BspDI	547
BspEI	2247	BspHI	3114	BspT104I	458	BspTI	343	BssHII	2589	BssSI	4535	Bst2BI	4535	BstAFI	343
BstBI	458	BstEII	2268	BstENI	3502	BstPI	2268	Bsu15I	547	BsuI	4510	CciI	3114	CciNI	1493
Cfr9I	2078	ClaI	547	CpoI	2250	CspI	2250	DraI	3014	DraIII	2705	DrdI	4606	DriI	1236
DseDI	4606	Eam1105I	1236	Ecl136II	672	Eco31I	2608	Eco53kI	672	Eco57I	4166	Eco91I	2268	EcoICRI	672
EcoNI	3502	EcoO65I	2268	EcoRI	483	FbaI	2108	FblI	1271	FseI	2812	HindIII	845	HpaI	2953
Kpn2I	2247	KpnI	667	KroI	2808	Ksp22I	2108	KspAI	2953	MfeI	2962	MroI	2247	MroNI	2808
MspCI	343	MunI	2962	NaeI	2810	NgoMIV	2808	NotI	1493	NspV	458	PaeR7I	1499	PagI	3114
PasI	2183	PauI	2589	PciI	4708	PdiI	2810	Pfl23II	2190	PflFI	2176	PfoI	2609	PscI	4708
PshBI	3789	Psp124BI	674	Psp1406I	209	PspEI	2268	PspLI	2190	PspXI	1499	PstI	3055	PsyI	2176
PteI	2589	RcaI	3114	RgaI	3590	RigI	2812	Rsr2I	2250	RsrII	2250	SacI	674	SalI	1270
ScaI	554	SfaAI	3590	Sfr274I	1499	SfuI	458	SgfI	3590	SlaI	1499	SmaI	2080	SspI	3515
SstI	674	StrI	1499	TspMI	2078	Tth111I	2176	Vha464I	343	VspI	3789	XagI	3502	XbaI	1511
XcmI	1732	XhoI	1499	XmaI	2078	XmaJI	2057	XmiI	1271	ZrmI	554				

Table 3. Restriction Enzymes That Cleave TR114 Twice

Acc36I	619	Acc36I	1406	AccB7I	479	AccB7I	3853	AjuI	462	AjuI	3618	Alw44I	1176	Alw44I	4394
AlwNI	1148	AlwNI	4299	ApaI	356	ApaI	4016	ApaLI	1176	ApaLI	4394	Asp700I	1195	Asp700I	1519
AsuNHI	44	AsuNHI	676	BalI	1027	BalI	2509	BasI	479	BasI	3853	BbsI	134	BbsI	1010
BcgI	71	BcgI	2575	BfuAI	619	BfuAI	1406	BglII	475	BglII	826	BmtI	48	BmtI	680
BpiI	134	BpiI	1010	BplI	1992	BplI	2024	BpuAI	134	BpuAI	1010	BpvUI	1268	BpvUI	3590
BsaXI	959	BsaXI	2512	BsmBI	2526	BsmBI	3606	Bsp120I	352	Bsp120I	4012	Bsp1407I	440	Bsp1407I	1633
Bsp19I	932	Bsp19I	1964	Bsp68I	1039	Bsp68I	3247	BspMI	619	BspMI	1406	BspOI	48	BspOI	680
BsrGI	440	BsrGI	1633	BstAUI	440	BstAUI	1633	BstV2I	134	BstV2I	1010	BtgZI	951	BtgZI	1308
BtuMI	1039	BtuMI	3247	BveI	619	BveI	1406	CaiI	1148	CaiI	4299	Cfr42I	1065	Cfr42I	2348
CsiI	1824	CsiI	2701	DinI	2343	DinI	2474	DraII	353	DraII	4013	Eco147I	2056	Eco147I	2465
EcoO109I	353	EcoO109I	4013	EgeI	2343	EgeI	2474	EheI	2343	EheI	2474	Esp3I	2526	Esp3I	3606
HincII	1272	HincII	2953	HindII	1272	HindII	2953	KasI	2341	KasI	2472	KspI	1065	KspI	2348
MabI	1824	MabI	2701	MlsI	1027	MlsI	2509	MluNI	1027	MluNI	2509	Mly113I	2342	Mly113I	2473
MroXI	1195	MroXI	1519	MscI	1027	MscI	2509	MslI	524	MslI	970	Msp20I	1027	Msp20I	2509
MvrI	1268	MvrI	3590	NarI	2342	NarI	2473	NcoI	932	NcoI	1964	NheI	44	NheI	676
NruI	1039	NruI	3247	PceI	2056	PceI	2465	PdmI	1195	PdmI	1519	PflMI	479	PflMI	3853
Ple19I	1268	Ple19I	3590	PluTI	2345	PluTI	2476	PspOMI	352	PspOMI	4012	PstNI	1148	PstNI	4299
PvuI	1268	PvuI	3590	RruI	1039	RruI	3247	RseI	524	RseI	970	SacII	1065	SacII	2348
SexAI	1824	SexAI	2701	SfiI	657	SfiI	839	SfoI	2343	SfoI	2474	Sfr303I	1065	Sfr303I	2348
SgrBI	1065	SgrBI	2348	SmiMI	524	SmiMI	970	SseBI	2056	SseBI	2465	SspDI	2341	SspDI	2472
StuI	2056	StuI	2465	Van91I	479	Van91I	3853	VneI	1176	VneI	4394	XmnI	1195	XmnI	1519

Table 4. Restriction Enzymes That Cleave TR114 Three times

AanI	427	AanI	1650	AanI	2933	AatII	66	AatII	2180	AatII	2678	AvaII	2250	AvaII	2360
AvaII	2692	BfmI	3051	BfmI	4252	BfmI	4443	Bme18I	2250	Bme18I	2360	Bme18I	2692	BmrI	141
BmrI	611	BmrI	1936	BmuI	141	BmuI	611	BmuI	1936	BpmI	1114	BpmI	1333	BpmI	2632
Bse3DI	421	Bse3DI	1658	Bse3DI	3088	BseMI	421	BseMI	1658	BseMI	3088	BsrDI	421	BsrDI	1658
BsrDI	3088	Bst6I	329	Bst6I	2293	Bst6I	3403	BstAPI	1802	BstAPI	1874	BstAPI	2705	BstSFI	3051
BstSFI	4252	BstSFI	4443	Eam1104I	329	Eam1104I	2293	Eam1104I	3403	EarI	329	EarI	2293	EarI	3403
Eco47I	2250	Eco47I	2360	Eco47I	2692	GsuI	1114	GsuI	1333	GsuI	2632	PsiI	427	PsiI	1650
PsiI	2933	SfcI	3051	SfcI	4252	SfcI	4443	TaqII	2152	TaqII	2776	TaqII	3844	VpaK11BI	2250
VpaK11BI	2360	VpaK11BI	2692	ZraI	64	ZraI	2178	ZraI	2676						