

Datasheet of GLuc-ON™ NFκB Transcriptional Response Element (TRE) Clone (TR115)

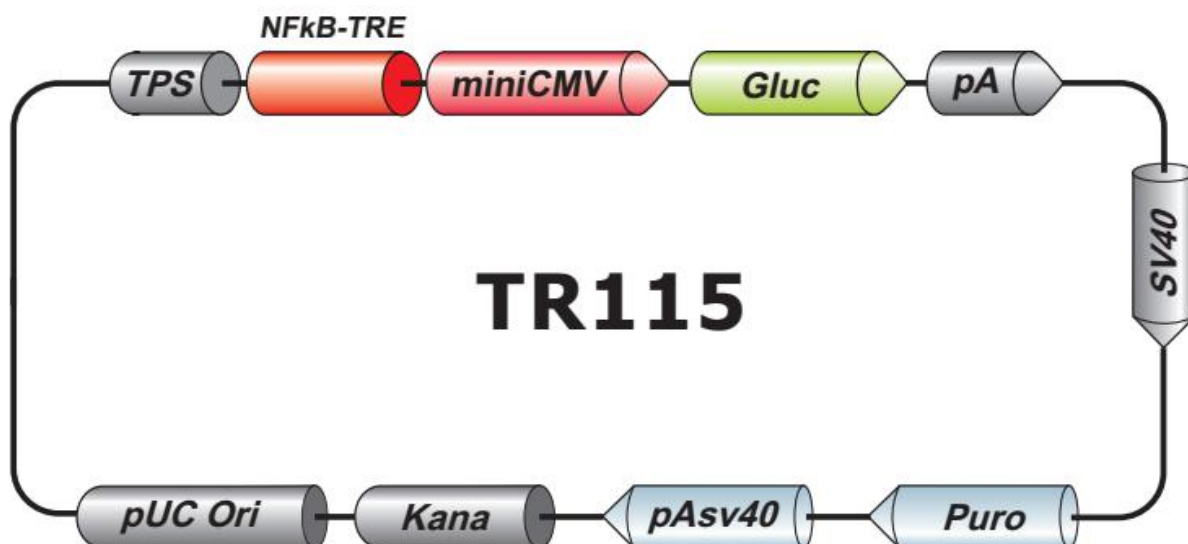


Figure 1. GLuc-ON™ NFκB Transcriptional Response Element (TRE) Clone (TR115)

Cat. No	TR115
Description	GeneCopeia's GLuc-ON™ NFκB transcriptional response element (TRE) clone enables analysis of the activity of NF κ B-regulated signal transduction pathways. NF κ B is a transcription factor with many gene targets, such as B-cell Activating Factor, T-cell secreted factor, and chemokines. NF κ B plays critical roles in immune system function, and its misregulation can lead to inflammatory diseases and cancer. The NFκB transcriptional TRE clone contains a minimal promoter and tandem repeats of the NFκB 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

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

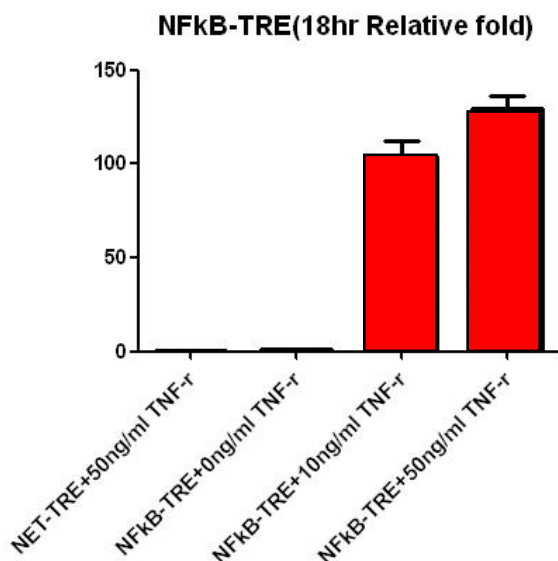


Table 1. Restriction Enzymes That Do Not Cleave TR115

AfeI	AgeI	AscI	BaeI	BaeI	BbvCI	BlnI	BsaAI
BstXI	Bst217I	Bsu36I	BtrI	EcoRV	FspI	MluI	NdeI
PacI	PmeI	PmlI	PpuMI	PshAI	PvuII	SanDI	SapI
SbfI	SgrAI	SnaBI	SpeI	SrfI	SwaI		

[illegible]

Table 3. Restriction Enzymes That Cleave TR115 Twice

Acc36I	619	Acc36I	1314	Acc65I	663	Acc65I	2698	AccB7I	479	AccB7I	3762	AjuI	462	AjuI	3527
Alw44I	1084	Alw44I	4303	AlwNI	1056	AlwNI	4208	Apal	356	Apal	3925	ApaLI	1084	ApaLI	4303
Asp700I	1103	Asp700I	1427	Asp718I	663	Asp718I	2698	AsuNHI	44	AsuNHI	676	Ball	935	Ball	2417
BasI	479	BasI	3762	BbsI	134	BbsI	918	Bcgl	71	Bcgl	2483	BfuAI	619	BfuAI	1314
BglII	475	BglII	734	BmtI	48	BmtI	680	Bpil	134	Bpil	918	BpII	1900	BpII	1932
Bpu10I	668	Bpu10I	3516	BpuAI	134	BpuAI	918	BpvUI	1176	BpvUI	3499	BsaXI	867	BsaXI	2420
BsmBI	2434	BsmBI	3515	Bsp120I	352	Bsp120I	3921	Bsp1407I	440	Bsp1407I	1541	Bsp19I	840	Bsp19I	1872
Bsp68I	947	Bsp68I	3156	BspMI	619	BspMI	1314	BspOI	48	BspOI	680	BsrGI	440	BsrGI	1541
BstAUI	440	BstAUI	1541	BstV2I	134	BstV2I	918	BtgZI	859	BtgZI	1216	BtuMI	947	BtuMI	3156
Bvel	619	Bvel	1314	Cail	1056	Cail	4208	Cfr42I	973	Cfr42I	2256	Csil	1732	Csil	2609
DinI	2251	DinI	2382	Drall	353	Drall	3922	Eco147I	1964	Eco147I	2373	EcoO109I	353	EcoO109I	3922
EgeI	2251	EgeI	2382	EheI	2251	EheI	2382	Esp3I	2434	Esp3I	3515	HincII	1180	HincII	2862
HindII	1180	HindII	2862	KasI	2249	KasI	2380	KpnI	667	KpnI	2702	KspI	973	KspI	2256
MabI	1732	MabI	2609	MisI	935	MisI	2417	MluNI	935	MluNI	2417	Mly113I	2250	Mly113I	2381
MroXI	1103	MroXI	1427	MscI	935	MscI	2417	MslI	524	MslI	878	Msp20I	935	Msp20I	2417
MvrI	1176	MvrI	3499	NarI	2250	NarI	2381	NcoI	840	NcoI	1872	NheI	44	NheI	676
NruI	947	NruI	3156	PceI	1964	PceI	2373	Pdml	1103	Pdml	1427	PfiMI	479	PfiMI	3762
Ple19I	1176	Ple19I	3499	PluTI	2253	PluTI	2384	PspOMI	352	PspOMI	3921	PstNI	1056	PstNI	4208
PvuI	1176	PvuI	3499	RruI	947	RruI	3156	RseI	524	RseI	878	SacII	973	SacII	2256
SexAI	1732	SexAI	2609	SfiI	657	SfiI	747	SfoI	2251	SfoI	2382	Sfr303I	973	Sfr303I	2256
SgrBI	973	SgrBI	2256	SmiMI	524	SmiMI	878	SseBI	1964	SseBI	2373	SspDI	2249	SspDI	2380
StuI	1964	StuI	2373	Van91I	479	Van91I	3762	VneI	1084	VneI	4303	XmnI	1103	XmnI	1427

Table 4. Restriction Enzymes That Cleave TR115 Three times

AanI	427	AanI	1558	AanI	2842	AatII	66	AatII	2088	AatII	2586	Avall	2158	Avall	2268
Avall	2600	BfmI	2960	BfmI	4161	BfmI	4352	Bme18I	2158	Bme18I	2268	Bme18I	2600	Bmrl	141
Bmrl	611	Bmrl	1844	Bmul	141	Bmul	611	Bmul	1844	Bpml	1022	Bpml	1241	Bpml	2540
Bse3DI	421	Bse3DI	1566	Bse3DI	2997	BseMI	421	BseMI	1566	BseMI	2997	BsrDI	421	BsrDI	1566
BsrDI	2997	Bst6I	329	Bst6I	2201	Bst6I	3312	BstAPI	1710	BstAPI	1782	BstAPI	2613	BstSFI	2960
BstSFI	4161	BstSFI	4352	Eam1104I	329	Eam1104I	2201	Eam1104I	3312	EarI	329	EarI	2201	EarI	3312
Eco47I	2158	Eco47I	2268	Eco47I	2600	GsuI	1022	GsuI	1241	GsuI	2540	PfoI	700	PfoI	721
PfoI	2517	Psil	427	Psil	1558	Psil	2842	Sfcl	2960	Sfcl	4161	Sfcl	4352	TaqII	2060
TaqII	2684	TaqII	3753	VpaK11BI	2158	VpaK11BI	2268	VpaK11BI	2600	Zral	64	Zral	2086	Zral	2584