

## pGL3-Basic Vector Restriction Enzyme Tables

The following restriction enzyme tables were constructed using DNASTAR® sequence analysis software. This information has not been verified by restriction digestion with each enzyme listed. The location given specifies the 3'-end of the cut DNA (the base to the left of the cut site). Vector sequences are also available in the GenBank® database (GenBank®/EMBL Accession Number U47295) and on the Internet at: [www.promega.com/vectors/](http://www.promega.com/vectors/)

### Restriction Enzymes That Cut the pGL3-Basic Vector 1-5 Times.

Enzyme	# of Sites	Location	Enzyme	# of Sites	Location
<b>AccI</b>	1	2011	<b>EcoICRI</b>	1	9
<b>AccIII</b>	2	783, 1299	EcoNI	3	645, 1045, 1705
<b>Acc65I</b>	1	1	EheI	1	122
<b>AcyI</b>	4	95, 121, 1514, 3690	FseI	1	1761
AflIII	3	15, 581, 2260	FspI	2	3375, 4548
<b>Alw26I</b>	5	1111, 1343, 1409, 3214, 3990	<b>HincII</b>	3	1392, 1902, 2012
<b>Alw44I</b>	2	2574, 3820	HindII	3	1392, 1902, 2012
AlwNI	1	2676	<b>HindIII</b>	1	53
AspHI	5	11, 1553, 2578, 3739, 3824	<b>HpaI</b>	1	1902
<b>AvaI</b>	3	26, 32, 1144	<b>Hsp92I</b>	4	95, 121, 1514, 3690
<b>AvaII</b>	3	1267, 3291, 3513	KasI	1	120
<b>BamHI</b>	1	2004	<b>KpnI</b>	1	5
<b>BanII</b>	4	11, 33, 1112, 4231	<b>MluI</b>	1	15
BbeI	1	124	<b>NaeI</b>	3	1759, 2130, 4199
BbsI	4	98, 1376, 1492, 2089	<b>NarI</b>	1	121
<b>BbuI</b>	1	751	<b>NcoI</b>	1	86
<b>BclI</b>	1	668	<b>NgoMIV</b>	3	1757, 2128, 4197
<b>BglI</b>	2	3273, 4541	<b>NheI</b>	1	21
<b>BglII</b>	1	36	<b>NotI</b>	1	4651
BsaI	1	3214	NspI	2	751, 2264
BsaAI	1	4302	PaeR7I	2	1675, 4266
BsaBI	1	2003	PpuMI	1	1267
BsaHI	4	95, 121, 1514, 3690	PshAI	1	2075
<b>BsaMI</b>	3	60, 1823, 1916	Psp5II	1	1267
BsmI	3	60, 1823, 1916	PspAI	1	26
BspHI	3	671, 2980, 3988	<b>PvuI</b>	2	3523, 4569
BspMI	3	1477, 1486, 4781	<b>SacI</b>	1	11
BsrGI	1	578	<b>SalI</b>	1	2010
BssSI	2	2433, 3817	<b>ScaI</b>	3	253, 3633, 4716
<b>BstZI</b>	3	1755, 1759, 4651	SgrAI	1	1516
<b>ClaI</b>	3	1997, 4709, 4813	<b>SinI</b>	3	1267, 3291, 3513
<b>Csp45I</b>	1	257	<b>SmaI</b>	1	28
<b>DraI</b>	4	1963, 3019, 3038, 3730	<b>SphI</b>	1	751
DraII	1	1267	SrfI	1	28
DraIII	1	4305	<b>SspI</b>	3	3957, 4510, 4625
DrdI	3	1489, 2368, 4349	<b>StyI</b>	1	86
DsaI	2	86, 458	<b>VspI</b>	1	3325
EaeI	4	1755, 1759, 3541, 4651	<b>XbaI</b>	1	1742
EagI	3	1755, 1759, 4651	XcmI	1	823
<b>EclHKI</b>	1	3153	<b>XhoI*</b>	1	32
<b>Eco47III</b>	1	2136	<b>XmaI</b>	1	26
Eco52I	3	1755, 1759, 4651	<b>XmnI</b>	1	3752

\*Due to the extent of supercoiling in this vector, the XhoI site has proven difficult to cut to completion under standard restriction digest conditions. For single XhoI digests, we recommend digesting the vector for a minimum of 2 hours using 20 units of enzyme per microgram of DNA at 37°C to ensure complete digestion. If performing a double digest with XhoI and another enzyme, linearize the vector using the companion enzyme prior to carrying out the XhoI digest. Under these conditions, XhoI will cut the vector following standard reactions conditions.

**Restriction Enzymes That Do Not Cut the pGL3-Basic Vector.**

AatII	AvrII	<b>BssHII</b>	<b>CspI</b>	<b>NdeI</b>	PmeI	<b>SacII</b>	Sse8387I
<b>AccB7I</b>	<b>BalI</b>	Bst1107I	Eco72I	<b>NruI</b>	PmlI	<b>SfiI</b>	<b>StuI</b>
AflIII	BbrPI	<b>Bst98I</b>	Eco81I	<b>NsiI</b>	Ppu10I	<b>SgfI</b>	Swal
<b>AgeI</b>	BlpI	<b>BstEII</b>	<b>EcoRI</b>	PacI	<b>PstI</b>	<b>SnaBI</b>	<b>Tth111I</b>
<b>ApaI</b>	Bpu1102 I	<b>BstXI</b>	<b>EcoRV</b>	PfIMI	<b>PvuII</b>	<b>SpeI</b>	
Ascl	Bsp120I	<b>Bsu36I</b>	<b>I-PpoI</b>	PinAI	RsrII	SpII	

**Note:** The enzymes in boldface type are available from Promega.