

Preclinical Grade Plasmids

With the most comprehensive and stringent QC
Tailored for preclinical studies

GenScript offers preclinical grade plasmids with the most comprehensive and stringent quality specifications and analysis for your preclinical project needs. Ideal for **preclinical *in vivo* animal studies, from mice to non-human primates, in gene therapy, cell therapy, and vaccine research.** Available in quantities of 10 mg and up.



Comprehensive QC

- Highly homogenous (≥90% supercoiled)
- Endotoxin free (≤0.005 EU/μg)
- Quantitative bacterial DNA & protein analysis



Animal- Free Production

- Plant based culture media
- Enzyme-free chromatographic purification
- TSE/BSE Certificate



Guaranteed Quantity

- From mg to multi-gram level
- High density fermentation
- Material archiving

	QC Item	Analytical Method	Specification
Default QC Items	Appearance	Visual inspection	Clear, colorless, no visible particulates
	A260:280	Nanodrop UV absorption	1.8-2.0
	Identity	Sequence verification of gene insert	100% alignment
	pH	pH meter	8.0±0.5 (in TE buffer)
	Restriction Analysis	Enzyme digestion	Conforming to reference pattern
	Homogeneity	Agarose gel electrophoresis	≥ 90% supercoiled
	Endotoxin	Quantitative LAL assay	≤0.01 EU/ug
	Residual E. coli DNA	Quantitative PCR	≤ 5%
	Residual RNA	Agarose gel electrophoresis	Non-detectable at 200ng
	Residual Host Protein	HCP ELISA	≤ 1%
Add-On QC Items	Bioburden Testing	Direct incubation	No growth after 48 hours
	Advanced Endotoxin Removal	Quantitative LAL assay	≤0.005 EU/ug
	Mycoplasma Contamination	Luminescence detection kits	Negative
	Detection of Kanamycin	ELISA	< 1.125 ng/ml

GenScript Plasmid DNA Preparation

One Stop Solution from R&D to Clinical Studies

Comparison of GenScript's Various Plasmid Prep Solutions

Service Grade	Rush Grade	Research Grade	Industrial Grade	Preclinical Grade
Appearance	✓			
A260:280	✓			
pH	-	-	-	✓
Restriction Analysis	-	-	✓	✓
Full Insert Sequencing	-	✓	✓	✓
Homogeneity	Predominantly supercoiled		≥ 90% supercoiled	
Endotoxin	-	-	Gel clot LAL assay <0.01 EU/ug	Quantitative LAL assay <0.01 EU/ug
Residual RNA	Non-detectable by gel electrophoresis at 200ng			
Residual E. coli DNA	Non-detectable by gel electrophoresis			Quantitative PCR ≤ 5%
Residual Host Protein	-	-	-	HCP ELISA ≤ 1%
Bioburden Testing	-	✓	✓	✓
Animal Free Production	Optional	Optional	Optional	Optional
Enzyme Free production	-	-	-	Optional
Advanced Endotoxin Removal <0.005 EU/ug	-	Optional	Optional	Optional
Mycoplasma Contamination	-	-	-	Optional
Detection of Kanamycin	-	-	-	Optional
Material Archiving	-	-	-	Optional

Interested in **GMP plasmids**? GenScript has GMP capability as well!

Contact us for details. Email: bioassay@genscript.com