Supporting Information for

Preparation of Mammalian Expression Vectors Incorporating

Site-Specifically Platinated-DNA Lesions

Wee Han Ang, William Wesley Brown, Stephen J. Lippard*

Department of Chemistry, Massachusetts Institute of Technology, 77 Massachusetts Ave.,

Cambridge, Massachusetts 02139.

*To whom correspondence should be addressed. E-mail: <u>lippard@mit.edu</u>

Running Title: Site-Specifically Platinated Mammalian Expression Vectors



Figure S1. HPLC purification of platinated 13-mer insertion strands; 13-is-Pt (left panel) and 13-is-oxPt (right panel).



Figure S2. HPLC purification of platinated 27-mer insertion strands, 27-is-Pt (left panel) and 27is-oxPt (right panel); top panel depicts HPLC purification of platinated 17-mer strand, bottom panel depicts denaturing HPLC purification of ligated 27-mer strands.

insertion strand	Nucleotide composition analysis								MALDI-TOF MS	
	dC		dG		Т		dA		(m/z)	
	obsd	calcd	obsd	calcd	obsd	calcd	obsd	calcd	obsd	calcd
13-is	6.2	6	3.0	3	2.0	2	1.8	2	3894	3895
13-is-Pt	6.1	6	1.1	1	2.0	2	1.7	2	4123	4124
13-is-oxPt	6.2	6	1.0	1	2.0	2	1.8	2	4204	4202
27-is	14.8	15	3.1	3	7.1	7	1.9	2	8022	8018
27-is-Pt	15.2	15	1.2	1	6.9	7	1.8	2	8245	8247
27-is-oxPt	15.3	15	1.0	1	7.1	7	1.6	2	8328	8325

Table S1. Characterization of the Insertion Strand by Nucleotide Composition Analysis^{*a*} and MALDI-TOF MS.

^{*a*}The insertion strand (500 pmol) was digested with nuclease S1 (10 U) for 12 h at 37 °C followed by calf intestinal phosphatase (10 U) for 4 h at 37 °C. Analyses of digests were carried out using reverse-phase HPLC with Supelcosil LC-18-S column; the gradient used was 5-15% B over 30 min, where solvent A contained 10 mM NaOAc and solvent B contained 100% methanol.