

### Supplementary materials

**Table S1.** Different storage conditions used to assess the stability of G4.5 and G5 complexes.

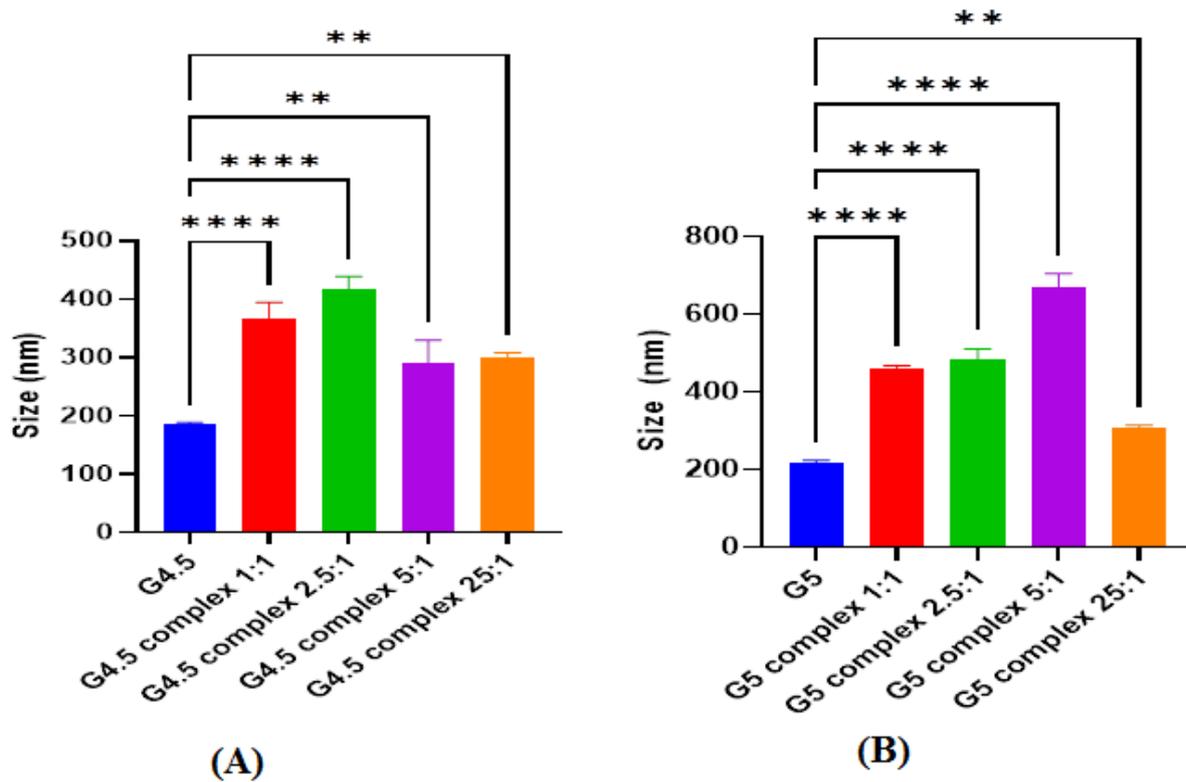
Nanoformulation	Condition	Temperature (°C)
G4.5 or G5 complex	At daylight	4
	In the dark	
	At daylight	25
	In the dark	
	At daylight	37
	In the dark	
	At daylight	50
	In the dark	

**Table S2.** Effect of heat and light on the stability of G4.5 complex 25:1.

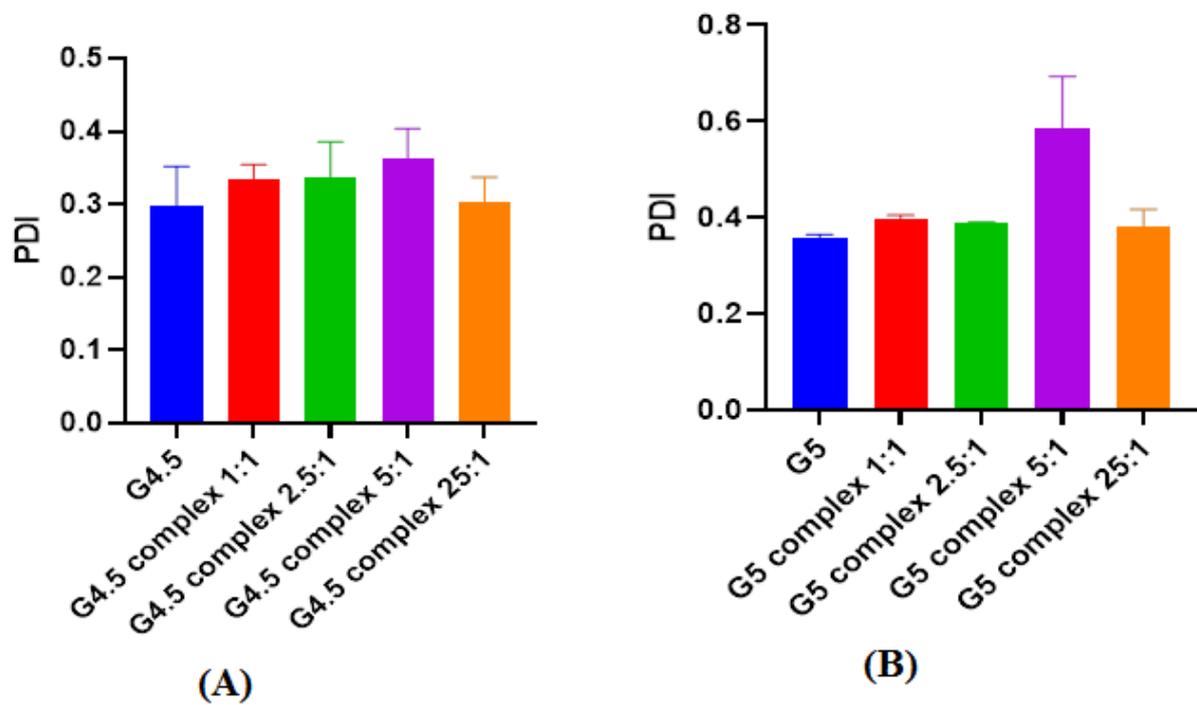
Nanoparticles	Condition	Temperature (°C)	Color change	Precipitation	Turbidity
G4.5 complex 25:1	At daylight	4	-	-	-
	In the dark		-	-	-
	At daylight	25	√	-	-
	In the dark		-	-	-
	At daylight	37	-	√	-
	In the dark		-	√	-
	At daylight	50	√	-	-
	In the dark		√	-	-

**Table S3.** Effect of heat and light on the stability of G5 complex 25:1.

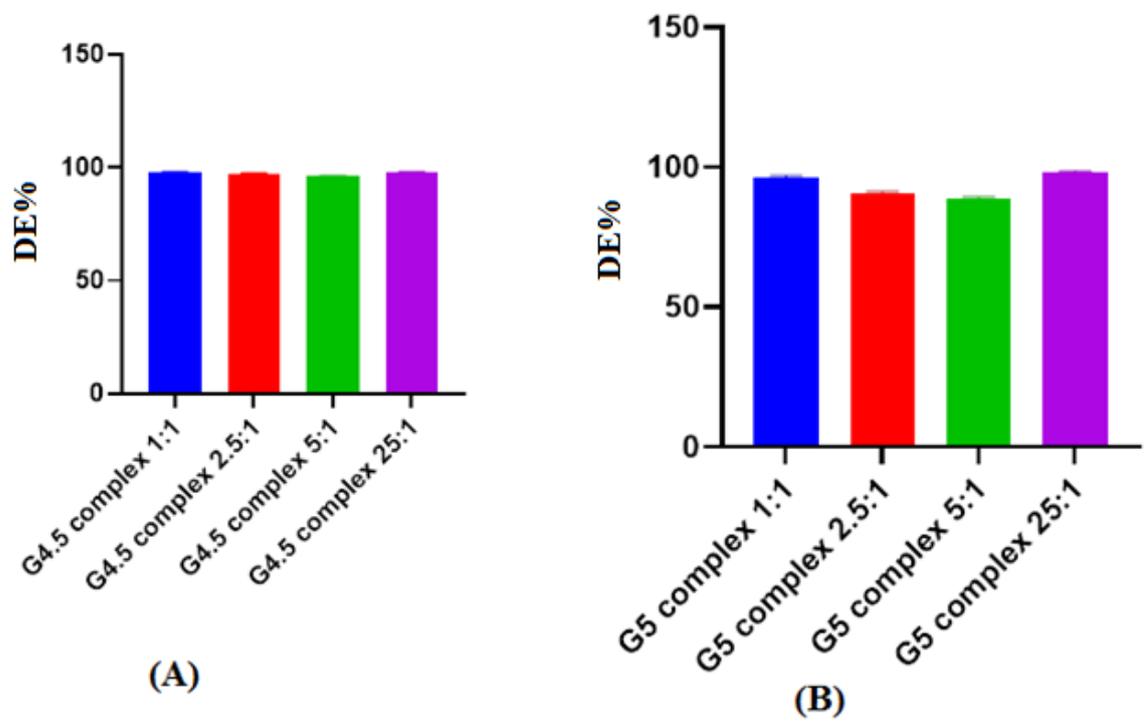
Nanoparticles	Condition	Temperature (°C)	Color Change	Precipitation	Turbidity
G5 complex 25:1	At daylight	4	-	-	-
	In the dark		-	-	-
	At daylight	25	√	-	-
	In the dark		-	-	-
	At daylight	37	-	√	-
	In the dark		-	√	-
	At daylight	50	√	√	-
	In the dark		√	-	-



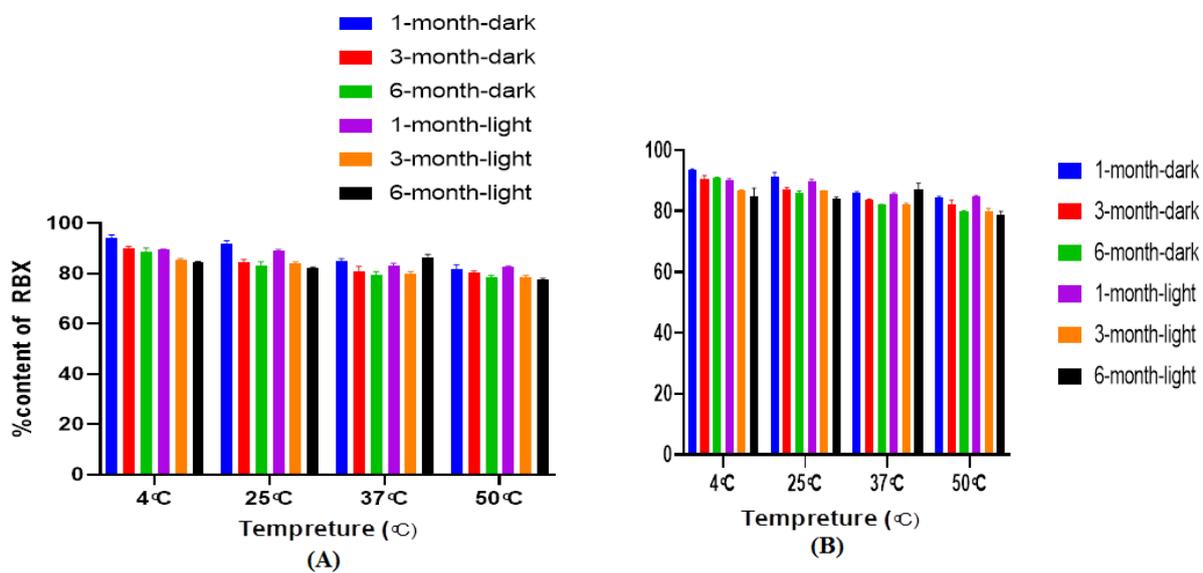
**Figure S1.** Particle size (PS) of (A) G4.5 and (B) G5 complexes along with the empty PAMAM dendrimers G4.5 and G5 (mean  $\pm$  SD,  $n = 3$ ; ANOVA, \*\*  $p \leq 0.01$ , \*\*\*\*  $p \leq 0.0001$ ).



**Figure S2.** Polydispersity index (PDI) of (A) G4.5 complexes and (B) G5 complexes along with the empty PAMAM dendrimers G4.5 and G5 (mean  $\pm$  SD,  $n = 3$ ).



**Figure S3.** Drug loading efficiency (DE%) of (A) G4.5 complexes and (B) G5 complexes (mean  $\pm$  SD,  $n = 3$ ).



**Figure S4.** Stability studies of RBX in (A) G4.5 complexes and (B) G5 complexes under different storage conditions (mean  $\pm$  SD,  $n = 3$ ).