Supplementary Information for

Patterned graphene oxide via one-step thermal annealing for controlling collective cell migration

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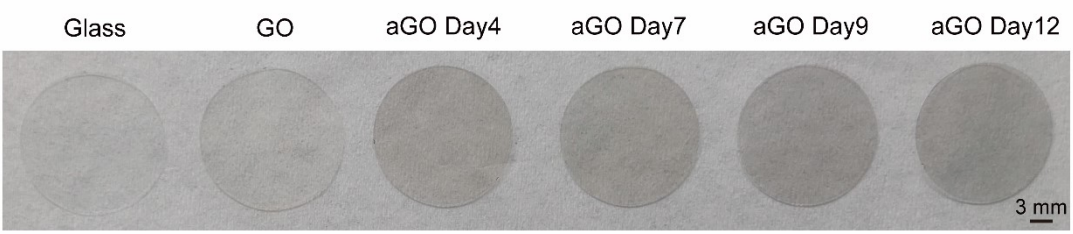

Fig. S1. Photos of glass, GO and aGO (Day 4, 7, 9, and 12) coating on glass.

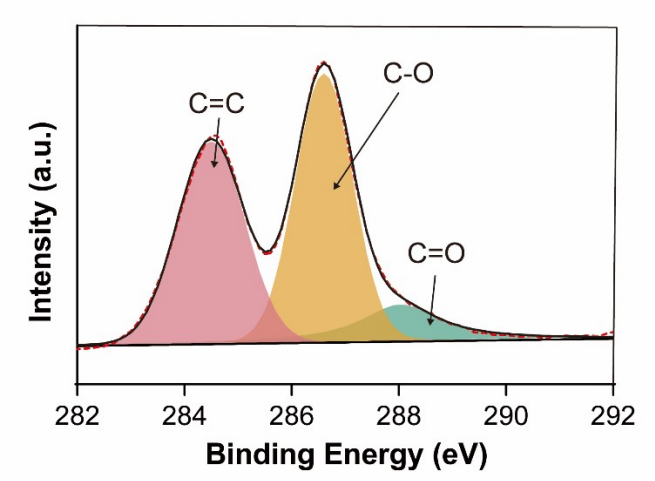

Fig. S2. C_{1s} XPS spectra of GO.

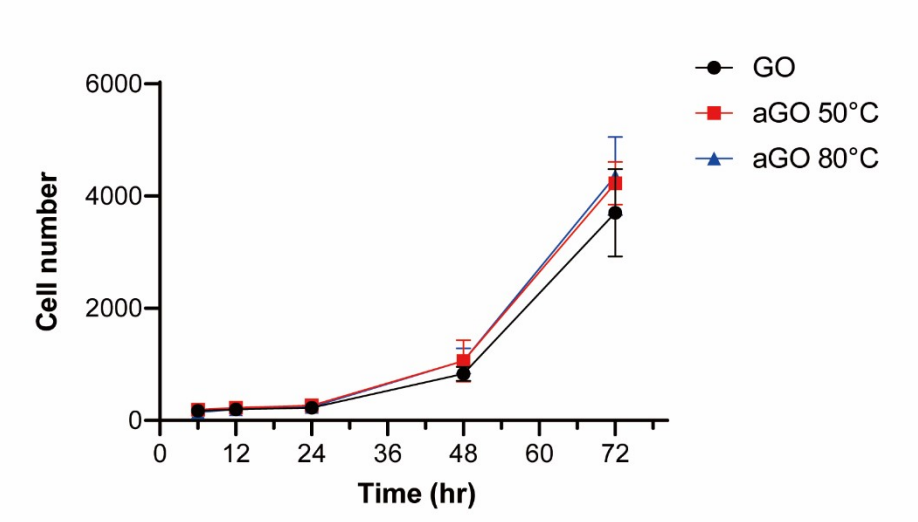

Fig. S3. Growth curve of HCT116 cells on different surfaces.

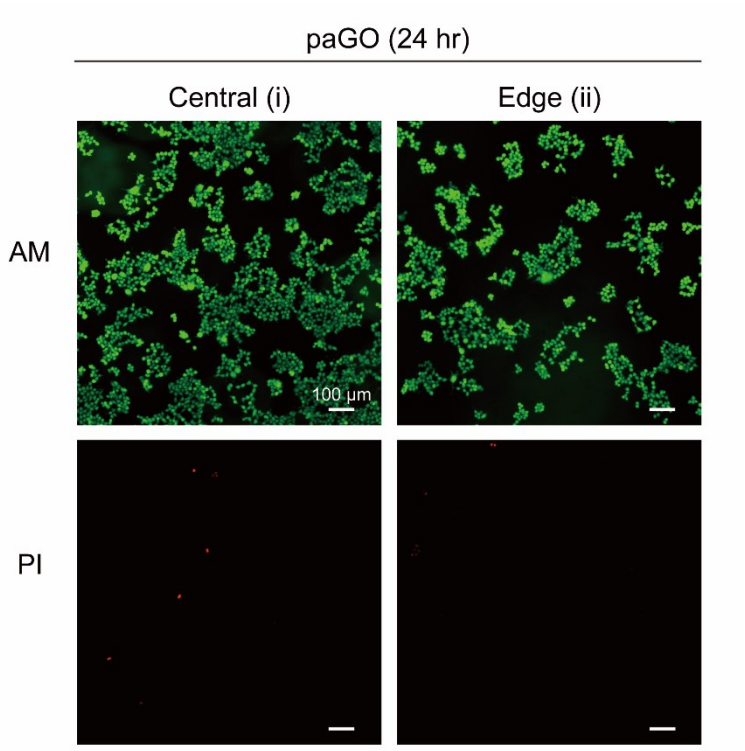

Fig. S4. Fluorescence images of Calcein-AM/PI stained Hct116 cells. The cells were cultured on paGO for 24 hr. Scale bar, 100 μm.

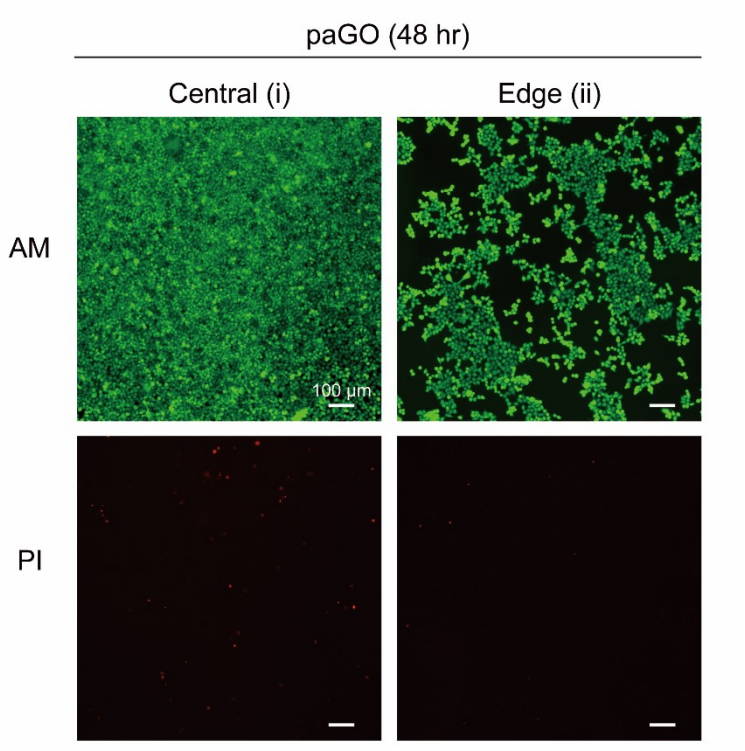

Fig. S5. Fluorescence images of Calcein-AM/PI stained Hct116 cells. The cells were cultured on paGO for 48 hr. Scale bar, 100 μm.

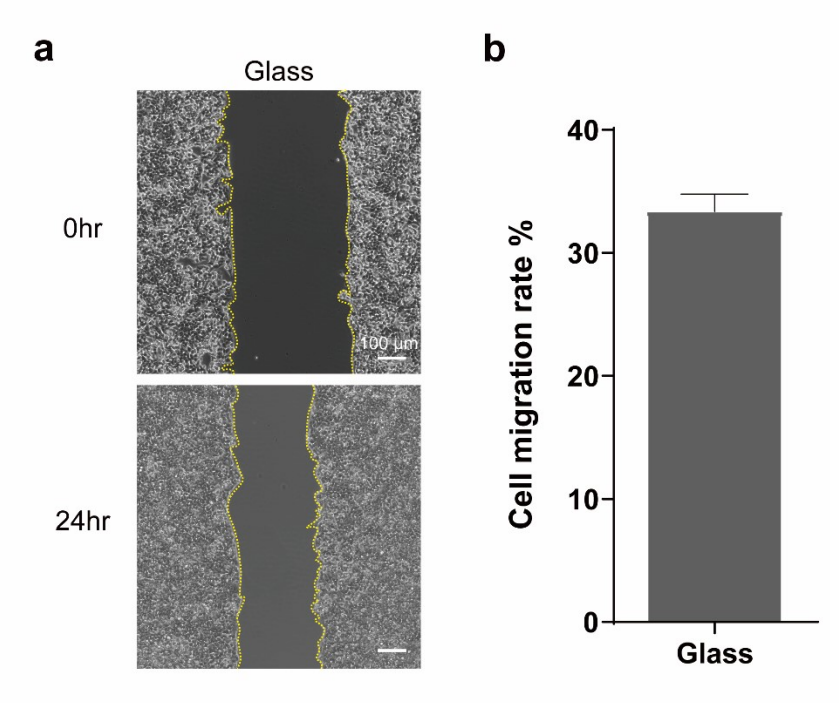

Fig. S6. The cell migration on glass interface. (a) Bright-field microscopy images of cells at the start and after 24 hours of migration. Scale bar, 100 μm. (b) The cell migration rate of glass.

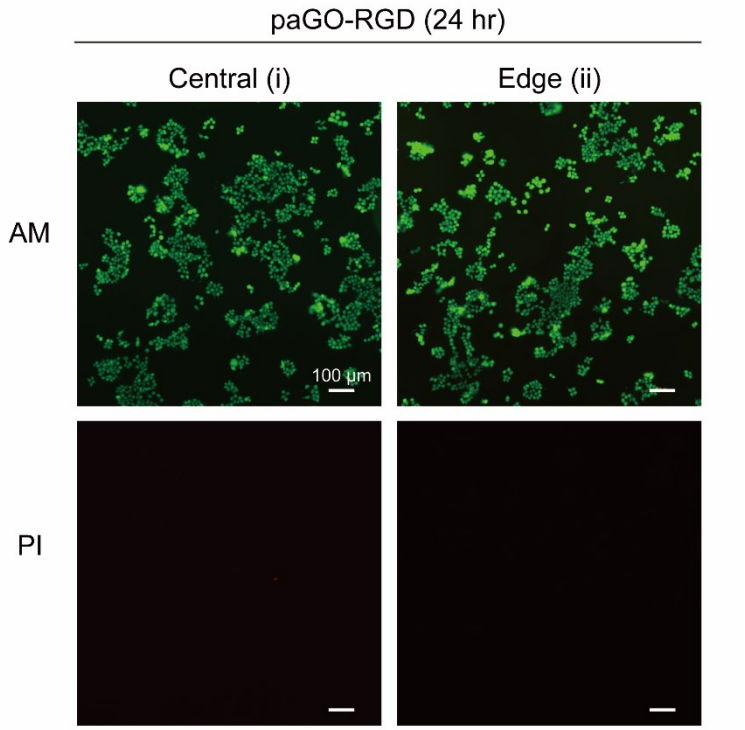

Fig. S7. Fluorescence images of Calcein-AM/PI stained Hct116 cells. The cells were

cultured on paGO-RGD for 24 hr. Scale bar, 100 μm.

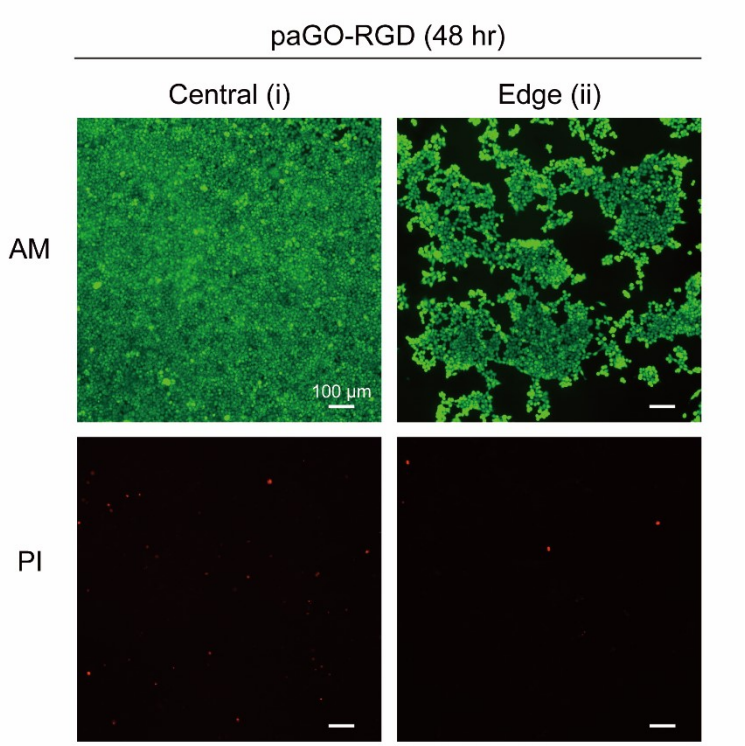

Fig. S8. Fluorescence images of Calcein-AM/PI stained Hct116 cells. The cells were cultured on paGO-RGD for 48 hr. Scale bar, 100 μm.

Table S1. Analysis of O_{1s} peaks obtained from XPS for PaGO

Sample	**Relative area of different chemical bonds (%)**	
	C=O/O=C-OH (~531.5 eV)	**C-O (~532.5 eV)**
GO	53.6	46.4
paGO Day1 Central (i)	32.9	67.1
paGO Day1 Edge (ii)	45.4	54.6
paGO Day4 Central (i)	35.4	64.6
paGO Day4 Edge (ii)	43.5	56.5
paGO Day7 Central (i)	31.3	68.7
paGO Day7 Edge (ii)	39.1	60.9

Table S2. Analysis of C_{1s} peaks obtained from XPS for PaGO-RGD

Sample	**Relative area of different chemical bonds (%)**				
	C=C (284.6 eV)	**C=N (286 eV)**	**C-O (~286.6 eV)**	**N-C=O (287.3 eV)**	**C=O (~288.5 eV)**
paGO-RGD Central (i)	45.1	28.2	13.4	5.8	7.6
paGO-RGD Edge (ii)	56.6	20.0	7.6	6.7	9.1

Description of the Supplementary Videos:

Video. S1 Thermal simulation model of paGO under single-point heating.