Data Repository

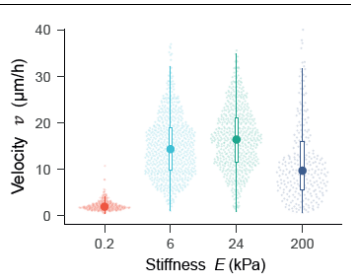
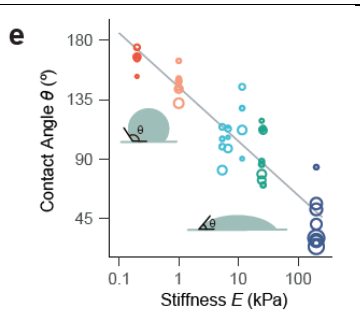
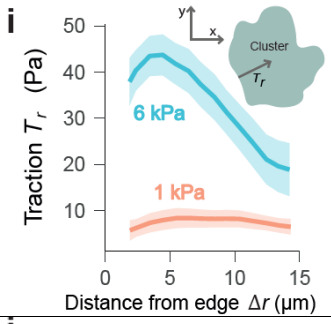
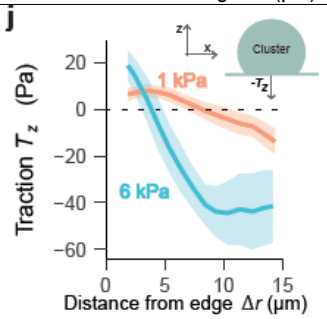
Figure	Graph	Dataset	Data Dictionary
Fig. 1d		Fig_1d.csv	- meanE: Gel stiffness in kPa - SpeedXY: Cluster speed modulus (um/h)
Fig. 1e		Fig_1e.csv	- meanE: Gel stiffness in kPa - diamAZ: Cluster diameter in um - ContactAngle: Comtact angle (º)
Fig. 1i		Fig_1i.csv	- DistRadial:Distance from the edge (um) - meanTracR: Radial Traction (Pa) - SE:Standard Error - meanE: Gel stiffness (kPa)
Fig. 1j		Fig_1j.csv	- DistRadial:Distance from the edge (um) - meanTracZ: Normal Traction (Pa) - SE:Standard Error - meanE: Gel stiffness (kPa)

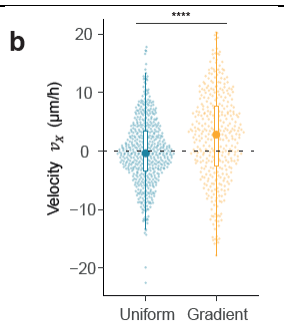
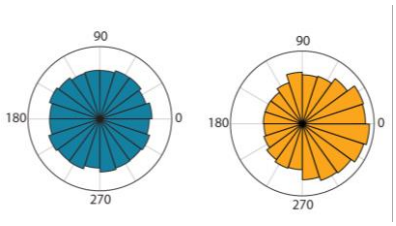
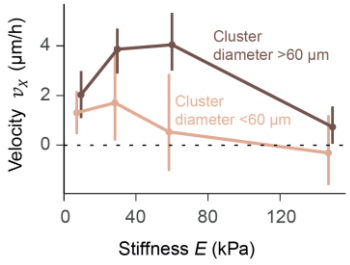
Fig. 2b		Fig2_b.csv	- Type: Type of gel (gradient or uniform) - SpeedX: Speed in the x direction (um/h)
Fig. 2c d		Fig2_cd.csv	- rangeTheta: Angle bin (rad, (-π,-π]) - count: number of displacement that the bin has - mean: mean value of the bin - Condition: “Uniform” for panel c; “Gradient” for panel d
Fig. 2e		Fig2_e.csv	- rangeE: Bin with stiffness (kPa) - LenBin: Bin with cluster length. “>60 ”and “>60” - n_clusters:number of clusters in each bin - n_displacements: number of displacements in each bin - medianSX: median of diaplacements in each bin - meanE: mean stiffness of each bin - CIL: Lower confidence interval of medianSX estimated by bootstrapping (um/h) - CIM: Higher confidence interval of medianSX estimated by bootstrapping (um/h)

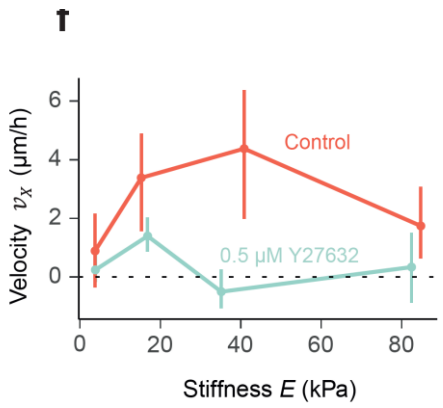
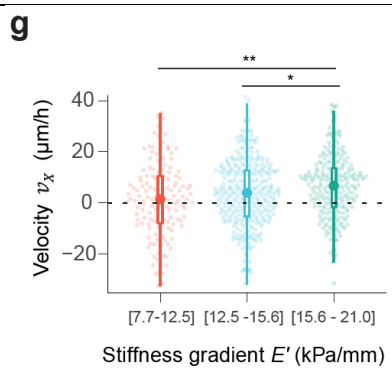
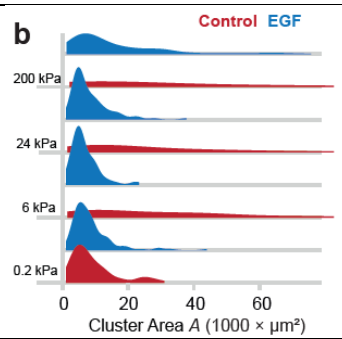
Fig. 2f		Fig2_f.csv	- Condition: “Control” or “0.5 uM Y27632” - rangeE: Bin with stiffness (kPa) - LenBin: Bin with cluster length. “>60 ”and “>60” - n_clusters:number of clusters in each bin - n_displacements: number of displacements in each bin - medianSX: median of diaplacements in each bin - meanE: mean stiffness of each bin - CIL: Lower confidence interval of medianSX estimated by bootstrapping (um/h) - CIM: Higher confidence interval of medianSX estimated by bootstrapping (um/h)
Fig. 2g		**Fig2_g.csv**	- rangeS: slope range (kPa/mm) - SpeedX: Speed in the X direction (um/h)
Fig. 4b		Fig4_b.csv	- Area: Area of the cluster in um^2 - Kind: Control+Stiffness - Condition: Control or EGF

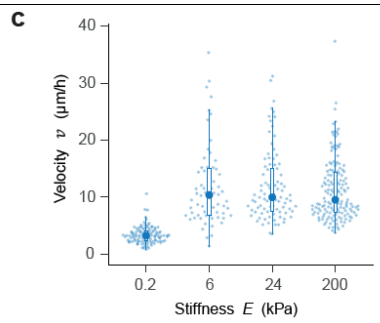
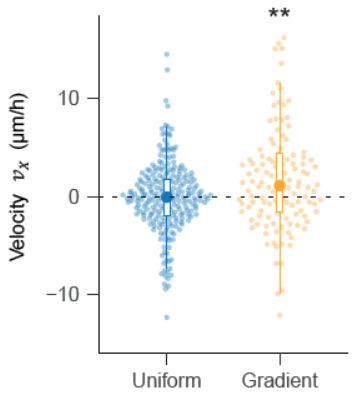
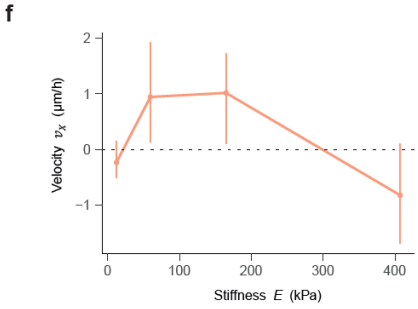
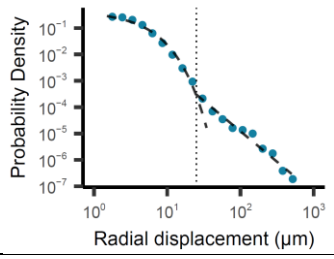
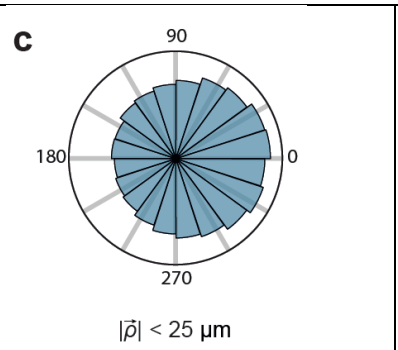
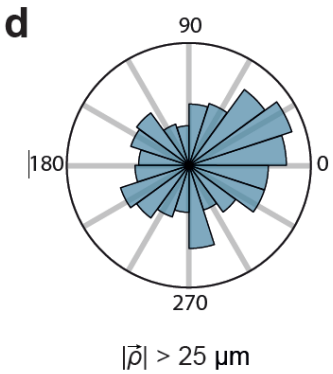
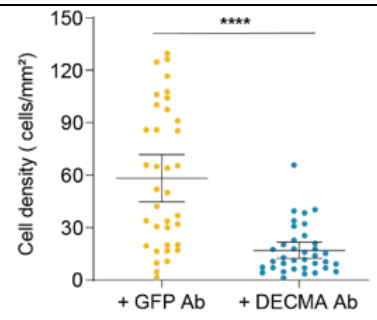
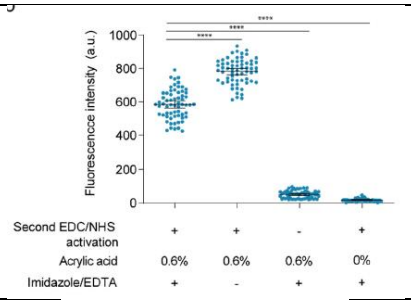
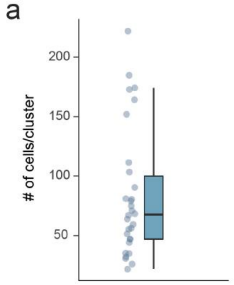
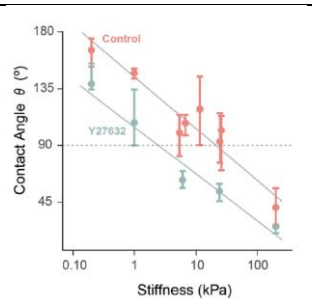
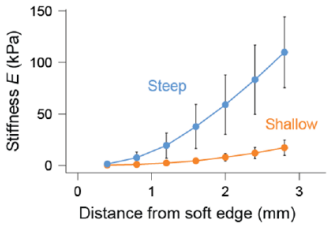
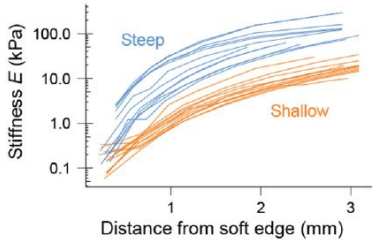
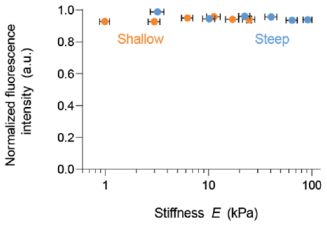
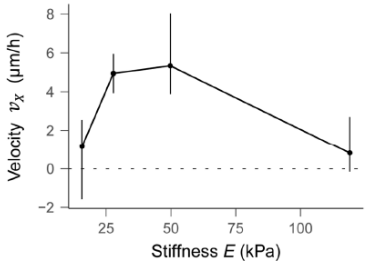
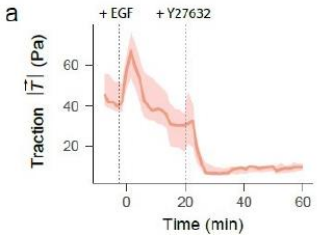
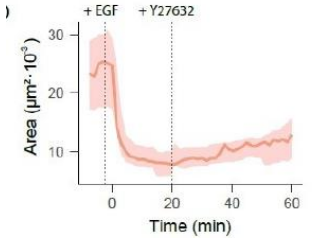
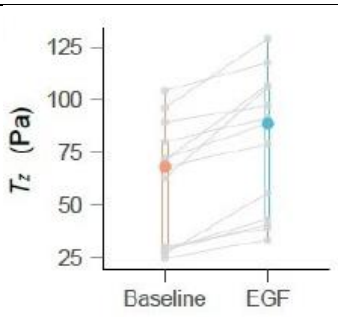
Fig. 4c		Fig4_c.csv	- meanE: Stiffness condition (kPa) - SpeedXY: Cluster Speed (um/h)
Fig. 4e		Fig4_e.csv	- Type: “Uniform” or “Gradient” - SpeedX: Speed along the X direction (um/h)
Fig. 4f		Fig4_f.csv	- rangeE: Bin with stiffness (kPa) - n_clusters:number of clusters in each bin - n_displacements: number of displacements in each bin - medianSX: median of diaplacements in each bin - meanE: mean stiffness of each bin - CIL: Lower confidence interval of medianSX estimated by bootstrapping (um/h) - CIM: Higher confidence interval of medianSX estimated by bootstrapping (um/h)
Fig. 5a		Fig5_a.csv	- breaks: Position of Radial displacement bin (um) - dens: Probability Density

Fig. 5c		Fig5_c.csv	- angle (rad, (-π,-π]) - count: number of displacements that the bin has
Fig. 5d		Fig5_d.csv	- angle (rad, (-π,-π]) - count: number of displacements that the bin has
Ext Fig. 2 c		Ex_Fig2_c.csv	- Condition: Antibody treatment, “GFP ab” or “DECMA” - Cell_Density: number of cells per mm^2
Ext Fig. 2b		Ex_Fig2_b.csv	- Fluo: Fluorescence (a.u.) - Condition: A: + 0.6% + B: + 0.6% - C: - 0.6% - D: + 0% +
Ext. Fig. 1a		Ex_Fig1_a.csv	- nuc: Density of cells per cluster

Ext. Fig. 1b		Ex_Fig_b.csv	- ContactAngle: Contact angle of each cluster (º) - meanE: Stiffness of the gel (kPa) - Condition: “Control” or “Y27632”
Ext. Fig. 4 a		Ex_Fig4_a.csv	- xn: Position of the gel in um - x: Position of the gel in mm - meanE: Mean measured stiffness (kPa) - SE: Standard Error of the mean - n:number of gels measured
Ext. Fig. 4b		Ex_Fig4_b.csv	- ID: Unique ID for each gel - Type: “Shallow” or “Steep” - x_mm: Position - E_kPa: measured stiffness (kPa)
Ext. Fig. 4c		Ex_Fig4_c.csv	- Type: Type of gel (Shallow or Steep) - Stiffness: Measured Stiffness (kPa) - Fluo: Normalized Fluorescence (a. u.) - X: - Id:
Ext. Fig. 5		Ex_Fig5.csv	- rangeE: Bin with stiffness (kPa) - n_clusters:number of clusters in each bin - n_displacements: number of displacements in each bin - medianSX: median of diaplacements in each bin - meanE: mean stiffness of each bin - CIL: Lower confidence interval of medianSX estimated by bootstrapping (um/h) - CIM: Higher confidence interval of medianSX estimated by bootstrapping (um/h)

Ext. Fig. 6a		Ex_Fig6_a.csv	- Time: Time (min) - Traction: Median Traction Forces (kPa) - CIL: Lower Confidence Interval of forces (kPa) - CIM: Maximal Confidence Interval of forces (kPa) EGF was added at time=-1.5 min Y27632 was added at time = 20 min
Ext. Fig. 6b		Ex_Fig6b.csv	- Time: Time (min) - Area: Median Area (um^2/1000) - CIL: Lower Confidence Interval of Area (um^2/1000) - CIM: Higher Confidence Interval of Area (um^2/1000)
Ext. Fig. 6g		Ex_Fig6_g.csv	- Condition: “Baseline” or “EGF” - meanTracZ: Mean Traction Z