

DOI: [10.4081/ejh.2017.2783](https://doi.org/10.4081/ejh.2017.2783)

Characterization of the role of RILP in cell migration

Azzurra Margiotta,^{1,2} Cinzia Progida,² Oddmund Bakke,² Cecilia Bucci¹

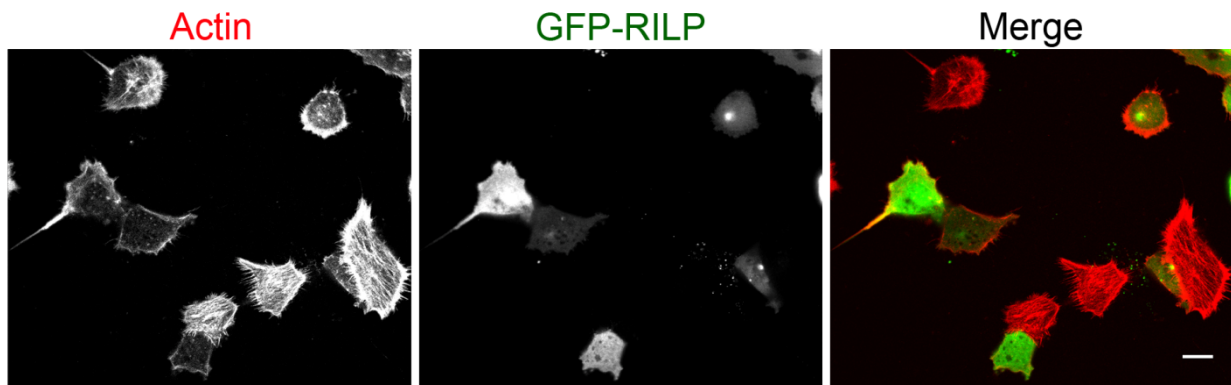
¹Department of Biological and Environmental Sciences and Technologies (DiSTeBA), University of Salento, Lecce, Italy

²Department of Biosciences, Centre for Immune Regulation, University of Oslo, Norway

Correspondence: Cecilia Bucci, Dipartimento di Scienze e Tecnologie Biologiche ed Ambientali, Università del Salento, Via Provinciale Monteroni 165, 73100 Lecce, Italy. Tel. +39.0832.298900 - Fax: +39.0832.298626. E-mail: cecilia.bucci@unisalento.it

Cinzia Progida, Department of Biosciences, Centre for Immune Regulation, University of Oslo, Blindernveien 31, 0371 Oslo, Norway. Tel. +47.922854441. E-mail: c.a.m.progida@ibv.uio.no

Key words: RILP; cell migration; cell adhesion; microtubules, cell polarization.



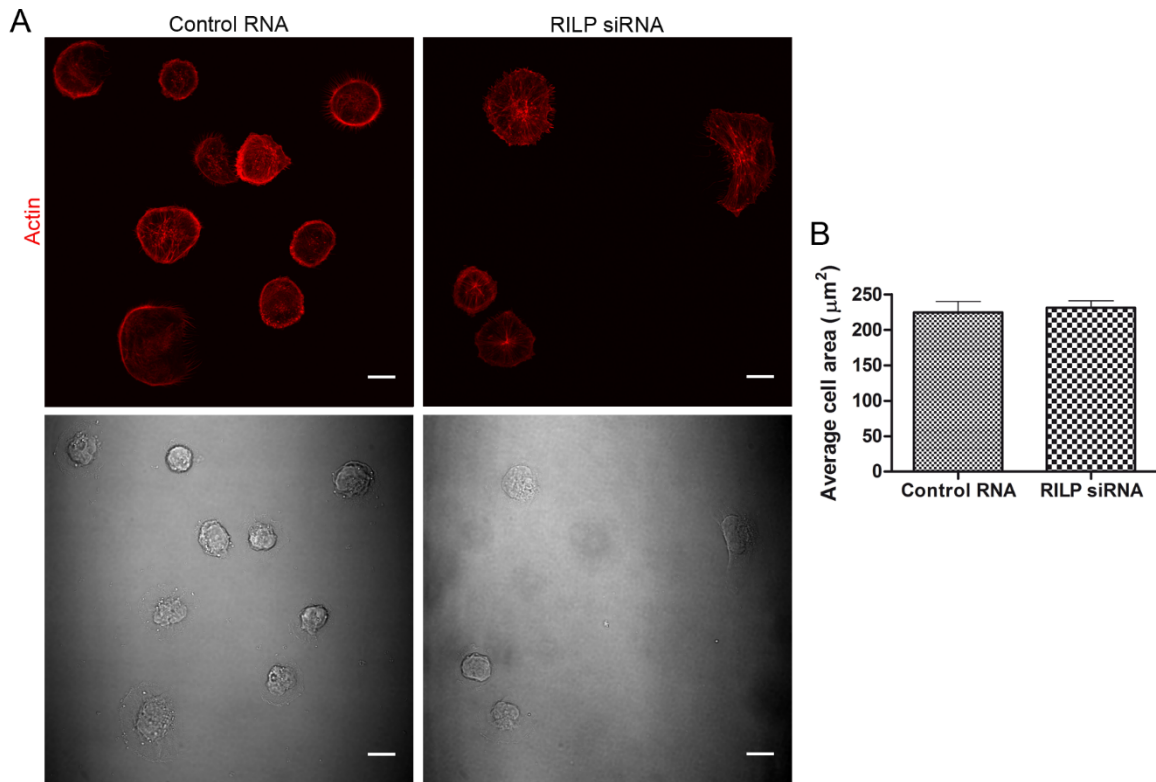
Supplementary Figure 1.

RILP affects actin re-arrangements during migration. NCI H1299 cells transfected with GFP-RILP (green) were fixed and stained with rhodamine-conjugated phalloidin (red). Scale bar: 10 μ m.



Supplementary Figure 2.

RILP depletion does not alter cell adhesion on fibronectin. A) NCI H1299 cells transfected with either control RNA or RILP siRNA were plated in equal number on fibronectin-coated plates and left to adhere for 15 or 30 min. Then, cells were washed with PBS and attached cells were fixed and imaged; scale bars 50 μ m. B) Quantification of the attached cell number for the indicated samples. Data represent the mean \pm SEM of three different experiments.



Supplementary Figure 3.

RILP depletion does not alter cell spreading on fibronectin. A) NCI H1299 cells transfected with either control RNA or RILP siRNA were plated on fibronectin-coated coverslips and left to adhere for 30 min; coverslips were then fixed and stained with rhodamine-conjugated phalloidin; confocal and relative transmission images are shown; scale bars: 10 μm . B) Quantification of the average area (in μm^2) of control and RILP-depleted cells. Data represent the mean \pm SEM of at least three different experiments (n=50).

Supplementary Movie 1.

RILP depletion fosters cell motility and the closure of the wound. Monolayers of NCI H1299 cells transfected either with control RNA (top) or RILP siRNA (bottom) were scratched by a pipette tip. Cell migration was imaged with an Olympus confocal microscope every 30 min.

Supplementary Movie 2.

RILP silencing does not influence microtubule dynamics. Control and RILP-depleted NCI H1299 cells were transfected with GFP-tubulin (green) and treated with LysoTracker Red (red). Cells were imaged with a Spinning Disk confocal microscope at 2 sec intervals.