1 *Supplementary Materials*

2 G9a correlates with VLA-4 integrin and influences the
3 migration of childhood acute lymphoblastic leukemia
4 cells.

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8 **Table S1.** Oligonucleotides for selected genes.

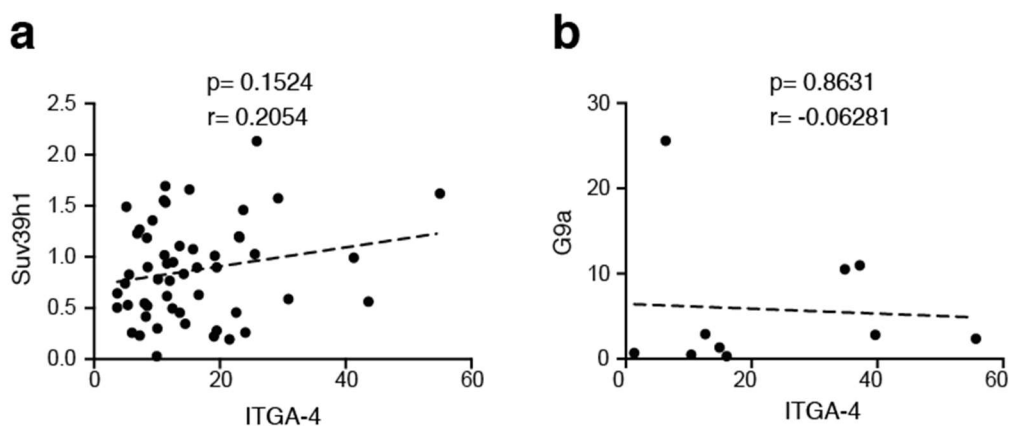| Gene name	Sense	Sequence
ITGA4	Forward	GCGTGGTACAACTTGACTGC
	Reverse	TCCTCTTCCGCTCTGCTG
G9A	Forward	GGACACCCTCGTAGTGAAG
	Reverse	GACAGAGGCTGGAGATGAGG
SUV39H1	Forward	GTCATGGAGTACGTGGGAGAG
	Reverse	CCTGACGGTCGTAGATCTGG

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11 **Figure S1** (**a**) ITGA-4 and Suv39h1 expression analyzed by RT-qPCR. Expression levels were normalized by
12 TBP and graph shows the mean of children ALL patients (n = 50). Pearson's correlation coefficient (*r*) and *p*-
13 value are shown. (**b**) Samples from healthy donors (n = 10) were analyzed for the correlation between ITGA-4
14 and G9a. Pearson's correlation coefficient (*r*) and *p*-value are shown.
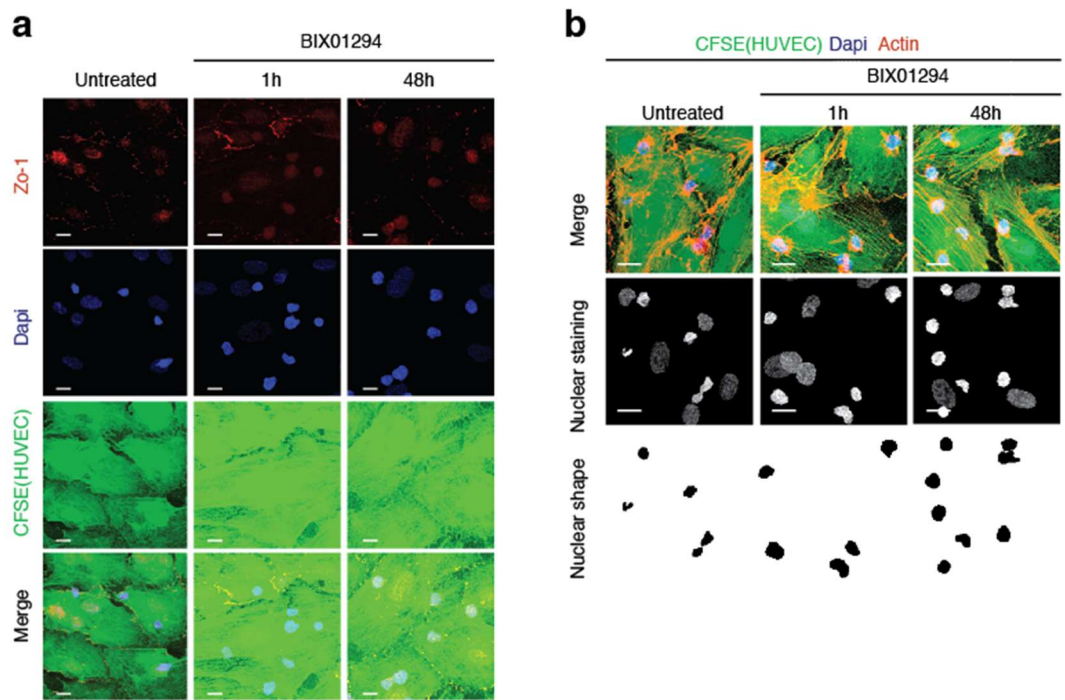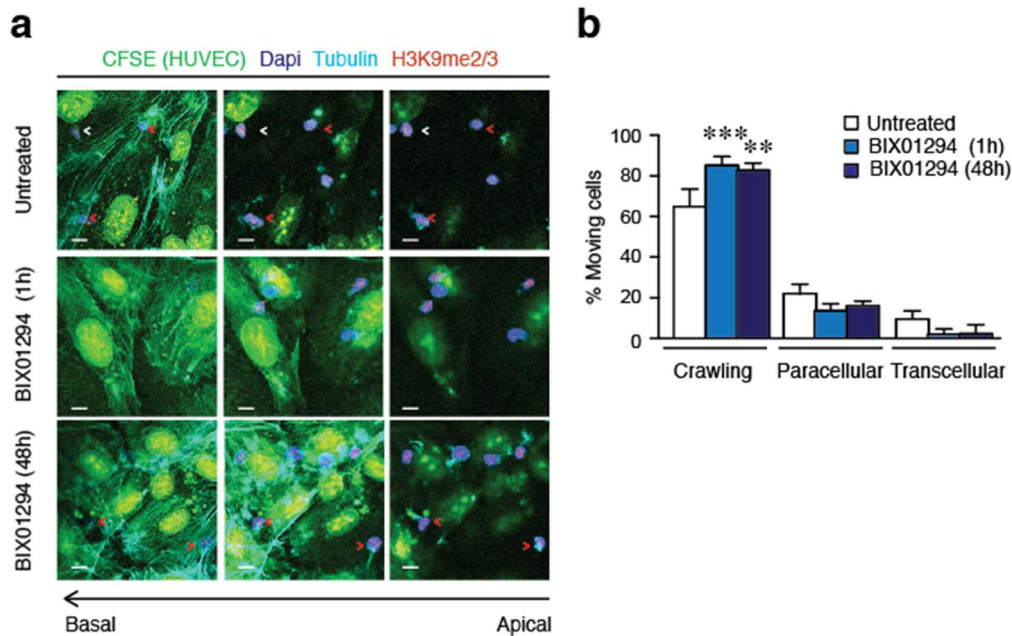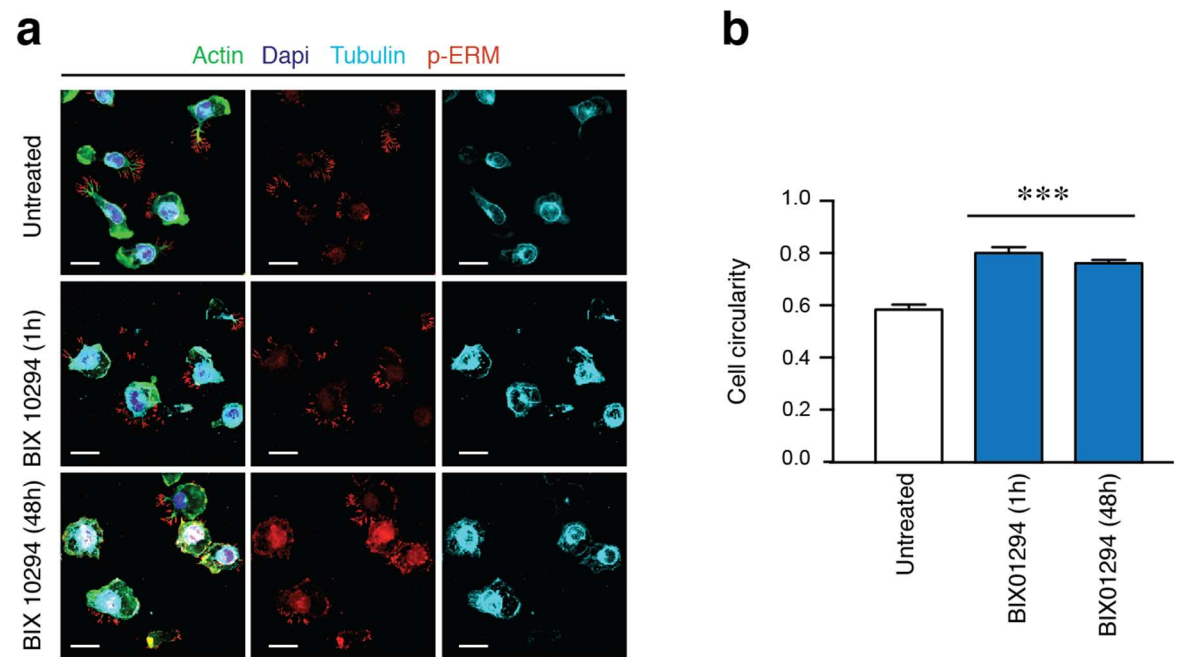
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Figure S2 (a) HUVEC cells were grown to confluency, labelled with CFSE and stimulated with TNFα for 16h. Control or BIX01294-treated Jurkat cells were plated on TNFα-activated HUVEC cells. Cells were fixed, permeabilized and analyzed to visualized their nuclei (DAPI, blue), F-actin (Phalloidin, cyan), and endothelial junctions (Zo-1, red). Bar= 10 μm. (b) Control and BIX01294-treated Jurkat cells were cultured on CFSE labelled HUVEC activated with TNFα, fixed and stained for DAPI (blue) and F-actin (red). Nuclear shapes were determined. Bar= 10 μm.

Supplementary Figure S3. (a) Control or BIX01294-treated Jurkat cells were plated on TNFα-activated HUVEC cells labelled with CFSE. After 30 min, cells were fixed, permeabilized and analyzed to visualize their nuclei (blue), F-actin (cyan), and H3K9me2/3 (red). White arrows indicate cells undergoing transcellular TEM. Red arrows indicate cells crossing through cell-cell junctions in paracellular TEM. (b) Graph shows the percentage of control or BIX01294-treated cells crawling or performing TEM. Mean n=3 ± SD. Bar= 10 μm. p<0.01 **; p<0.001 ***.

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31 **Supplementary Figure S4.** (**a**) Control or BIX01294-treated Jurkat cells were cultured on VCAM1 (2 µg/ml) for
32 20 min. Cells were fixed and stained for tubulin (cyan) and trailing edge (phospho-ERM) marker. (**b**) Graph
33 shows the rounded shape (circularity) of control or BIX01294-treated cells. Mean n=3 replicates ± SD. Bar= 10
34 µm. $p < 0.001$ ***.

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