Cell Reports

Supplemental Information

Specific Myosins Control Actin Organization, Cell Morphology, and Migration in Prostate Cancer Cells

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Table S1. Myosin isoforms detected by rt-PCR in prostate cell lines: LNCaP, PC-3, DU145, 1535 NP and 1535 CT (see Experimental Procedures)

The table shows the myosin isoforms tested for expression by rt-PCR (see Experimental Procedures). The myosin isoforms MYO1A, MYO1F, MYO1G, MYO1H, NM2B, MYO3B, MYO15A, MYO15B, and MYO18B were tested, but not detected by rt-PCR (and are thus not listed in the table below). Isoforms MYO3A, MYO5A and MYO7A were only detected in DU-145 cells (+). 12 isoforms were detected in all 5 cell lines as shown in the table (+).

Myosin	LNCaP	PC-3	DU-145	1535 NP	1535 CT
MYO1B	+	+	+	+	+
MYO1C	+	+	+	+	+
MYO1D	+	+	+	+	+
MYO1E	+	+	+	+	+
NM2A	+	+	+	+	+
MYO3A	-	-	+	-	-
MYO5A	-	-	+	-	-
MYO5B	-	-	-	+	+
MYO5C	+	+	+	+	+
MYO6	+	+	+	+	+
MYO7A	-	-	+	-	-
MYO9A	+	+	+	+	+
MYO9B	+	+	+	+	+
MYO10	+	+	+	+	+
MYO16	-	+	-	+	+
MYO18A	+	+	+	+	+
MYO19	+	+	+	+	+

Table S2. Sequences of primers used for PCR reactions (See Experimental Procedures).

MYOSIN	FORWARD (5' → 3')	REVERSE (5' → 3')
MYO1A	GGCAGATTTCATCTACAAGAGCA	GTTTGTGGATGGCAAATTGTT
MYO1B	GGGCTTACTGGCTTGGATCT	ACAGCAACTGCATGCTTACG
MYO1C	CTCATCACCAAGGCCAAGA	CCTTTATCACCGAGAATTCAGC
MYO1D	CCCTGCAGACGATTTTCAATA	TGCAACCTTTGCCCTGAC
MYO1E	CAAGACCGTCCGGAACAA	CCACCTGGACTGAACTGGAT
MYO1F	AGACTGTGCGCAACAACAA	CGGCTGAACTGGATCTCAA
MYO1G	CTTCCACGCCTTCTACCAAT	TCTCCAAGTGCAGTTCATGC
MYO1H	ATAGCCCGTGACAGACTGCT	GGAGCGTTCTGGCATTTC
NM2A	TGGAGGACCAGAACTGCAA	GGTTGGTGGTGAACTCAGCTA
NM2B	ATGAACCAGAAACGGGAGGT	AAGGACTCCAAGAGGGGTGT
MYO3A	GAAAAATTAATCAACCTGGCAAA	TGGTTGTCTCTCTGGCATGA
MYO3B	TGTCTTCTCGGATATGCCATC	TGCAAGACCATTTTCTGAACC
MYO5A	GCGTCGGAGCTCTACACAA	TTGAGCAGCTCTGCTGACTT
MYO5B	CCTACCAAGGCCTAAAGCAAG	CCTCCTCCTCATGCTCCA
MYO5C	AAAGACCTTCACGCTTCTGG	GCGGTGATCTGCACATTG
MYO6	CTCCAGCTTCACCCGTACA	CGATCTCCTGTTTCCACTATCC
MYO7A	GCTGGCAGGTCACTGAGAGT	AATCACCATGGTCCCAAGTC
MYO7B	CAAGCACGCAGGGAAGTC	TTTGGCTCCGTAGTTTGCTC
MYO9A	CAGATAACAAAGAAACCCCTCAG	TCCACCGTGAAGCAATCC
MYO9B	CAACCAGCACATCTTCAAGC	TGTTGTGCCACGTGATCC
MYO10	AGGACTTTCCACCTGATTGC	CGTGGACCTGACTCAGCA
MYO15A	ATGAACCAGAAACGGGAGGT	AAGGACTCCAAGAGGGGTGT
MYO15B	GATGCCTACGGCTTTGAGG	GGCTGGAGAAGAGCTGTAGG
MYO16	CCTGCGTGAGAAGAAGGAAC	CACTTTTCGGACTCCCATCT
MYO18A	GGACATGGTGACAAAGTATCAGAA	TTTGACAACCAGGACTTGACC
MYO18B	AGCATGGCCATCTCATCAC	TCTTGTCCTCTTCCCGAATC
MYO19	CGCAGACCTTTCTCCAAGAG	GATATGGATGGTCTCCACGAG
HOUSEKEEPING GENES:		
GAPDH	GAAGGTGAAGGTCGGAGTC	GAAGATGGTGATGGGATTTC
18S rRNA	GTAACCCGTTGAACCCCATT	CCATCCAATCGGTAGTAGCG

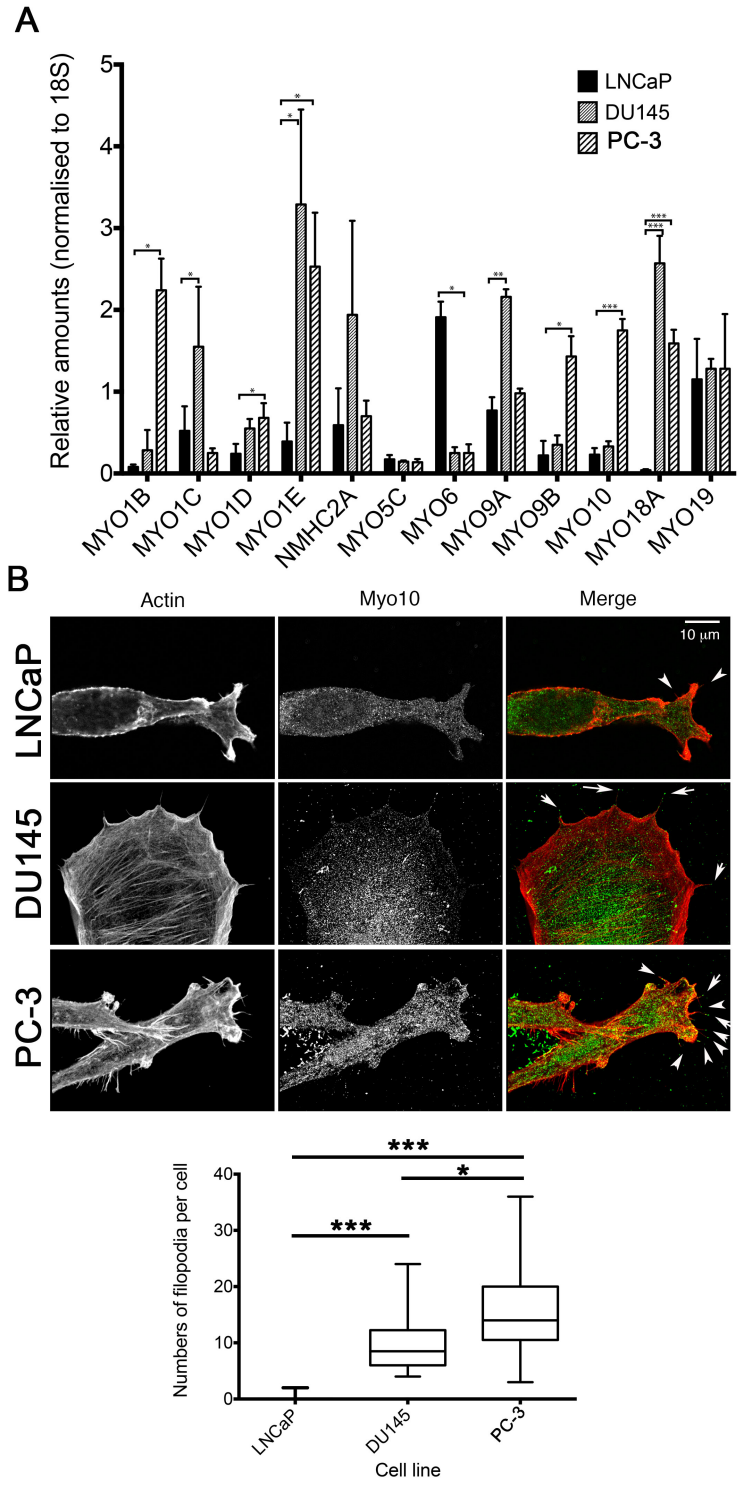

Figure S1: **qPCR and Myo10 immunostaining data data for LNCaP, DU145 and PC-3 (see Figure 1 and Experimental Procedures).** (**A**) qPCR data as shown in Figure 1 (with the addition of the data for DU145). (**B**) shows representative images of filopodia in the three different cell lines, together with quantification of the numbers of filopodia per cell for each cell type. Data for PC-3 and LNCaP as shown in Figure 2C (Main text), with the addition of values here for DU145 cells. The graph shows box and whisker plots, with the whiskers showing minimum and maximum data points. We found low, medium and high numbers of filopodia for LNCaP, DU145 and PC-3 cells, respectively. Significant differences are indicated by the bars and asterisks, with * as $p<0.05$, *** as $p<0.01$ and *** as $p<0.001$.