

Supplementary for "Cytoskeletal and motility changes in human MSCs associated with nuclear-cytoplasmic Rho redistribution during replicative senescence"

immediate

1 | ADDITIONAL TABLES

TABLE 1 Cheddock scale for Kendall correlation coefficient estimation

Tau-Kendall Correlation coeff value	Colocalization
< 0.1	no link
0.1-0.3	weak
0.3-0.5	moderate
0.5-0.7	noticeable
0.7-0.9	high
0.9-0.99	very high

TABLE 2 PCA analysys of myosin-9/F-actin colocalization data loadings for 2 factors

	Rval	tM1	tM2	bTau	Rs
Factor 1	0.77	0.91	0.97	0.19	0.23
Factor 2	0.46	0.13	0.17	0.98	0.96
Uniqueness	0.198	0.159	0.039	0.005	0.024

2 | ADDITIONAL FIGURES

TABLE 3 Kruskal-Wallis rank sum test results for myosin-9 and F-actin colocalization coefficients

Colocalization coefficient	chi-squared	df	p-value
Kendall's Tau-b	34.669	10	0.0001422
Spearman's R	34.373	10	0.0001596
Manders' M	16.107	10	0.09661
Pearson's R	15.152	10	0.1266

TABLE 4 Logistic regression with myosin-9 and F-actin colocalization coefficients as predictors and passage number as fitted values

	Df	Deviance	Resid. Df	Resid. Dev	Pr(>Chi)
NULL			115	68.13	
Rval	1	0.95	114	67.18	0.3295
tM1	1	0.91	113	66.27	0.3407
tM2	1	1.32	112	64.96	0.2510
bTau	1	4.14	111	60.82	0.0419 *
Rs	1	0.20	110	60.61	0.6509

TABLE 5 Logistic regression with α -actinin-4 and nucleus colocalization coefficients as predictors and passage number as fitted values

	Estimate	Std. Error	z value	Pr(> z)
(Intercept)	3.7063	1.6058	2.31	0.0210
bTau	58.8841	22.4644	2.62	0.0088
tM1	-0.9898	1.5118	-0.65	0.5126
tM2	-1.9521	1.6107	-1.21	0.2256
Rval	-4.3852	1.9107	-2.30	0.0217
Rs	-50.4674	17.4231	-2.90	0.0038

TABLE 6 Logistic regression with RhoA and nucleus colocalization coefficients as predictors and passage number as fitted values

	Estimate	Std. Error	z value	Pr(> z)
(Intercept) (**)	2.2687	0.7100	3.20	0.0014
bTau (***)	97.1021	27.8353	3.49	0.0005
Rval	0.5242	1.3355	0.39	0.6947
Rs (***)	-78.1599	22.1536	-3.53	0.0004

TABLE 7 Superose 6 column Gel-filtration calibration protein set

Protein	Molecular weight (Mr), kDa
Ovalbumin	43
Horse spleen Thyroglobulin	669
Rabbit muscle Ferritin	440
Chicken egg white Aldolase	158
Bovine erythrocytes Ovalbumin	43
Bovine lung Ribonuclease A	13.7

JKL, just keep laughing; MN, merry noise.

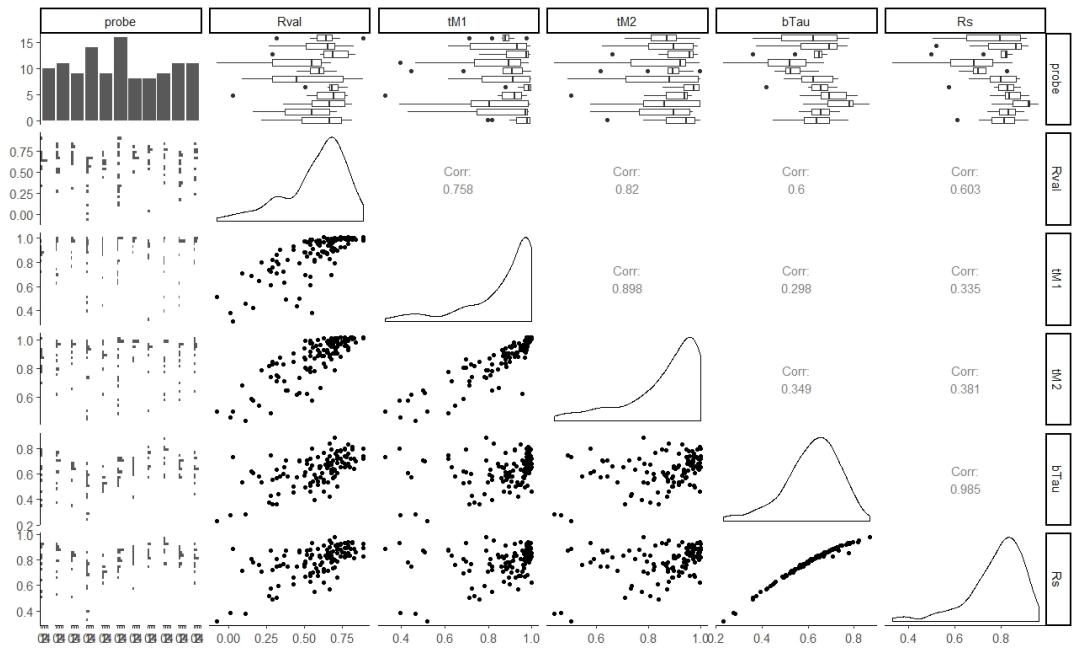


FIGURE 1 Correlation matrix of correlation coefficients calculated for correspondent colocalization.

F-actin and Myosin-9 colocalization in MSCWJ-1

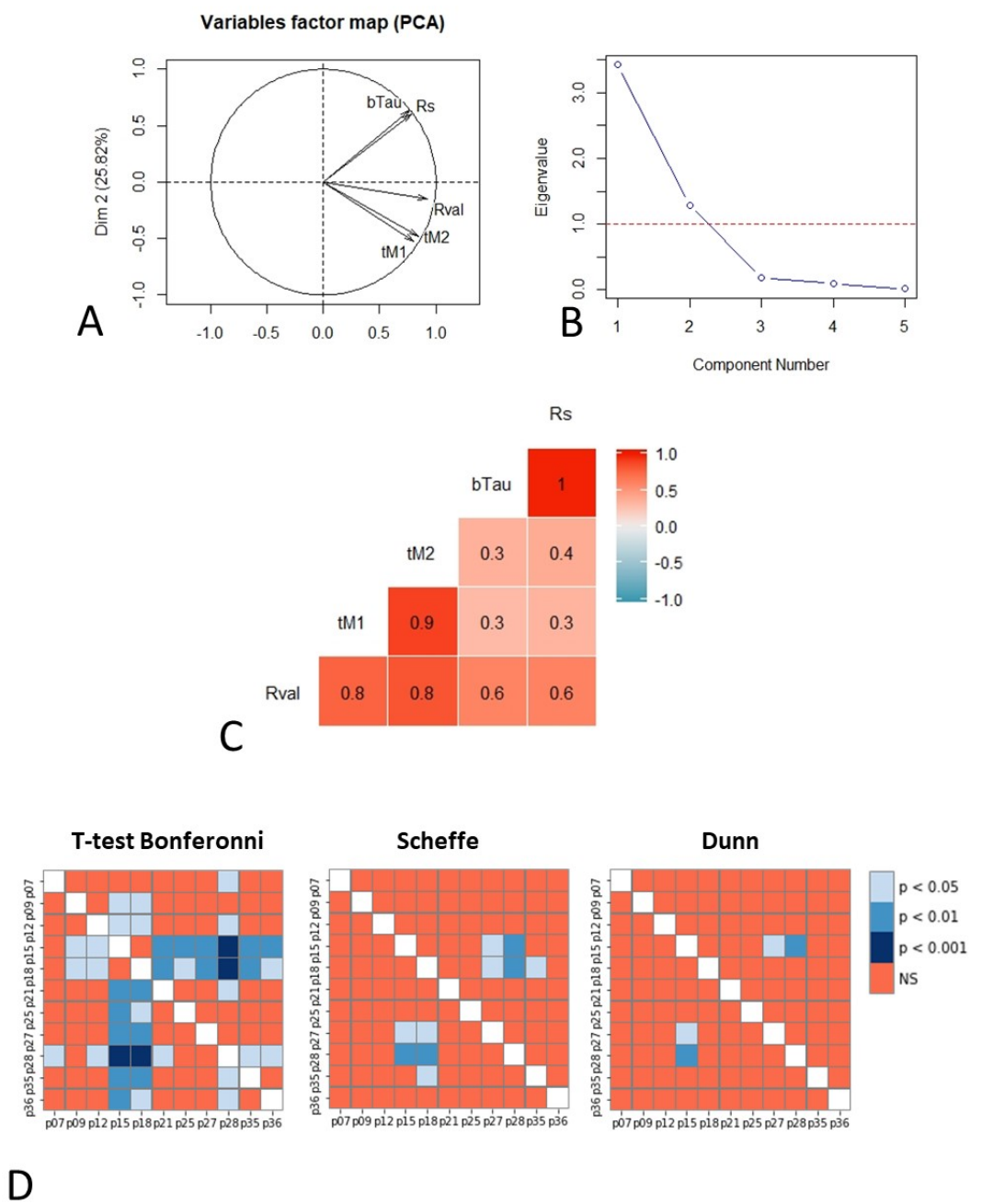


FIGURE 2 (A) Variables factor map (PCA) (C) Scree plot (D) Correlation plot (E) Pairwise comparison post hoc tests.