

Table 4 – FRAP stat table

Sheet	Comment
TUBB3	Row stat and p-value related to all TUBB3 FRAP experiment (FIG 8B-E)
APP	Row stat and p-value related to APP FRAP experiment (FIG 8F)
THBS1	Row stat and p-value related to all THBS1 FRAP experiment (FIG 8F)
ACTB	Row stat and p-value related to all ACTB FRAP experiment (FIG 8SB)

Legend

SEM	Standard error of the mean (based on the number of the single axons FRAP per experiment)
N	Number of the single axons FRAP per experiment
CHX	Cyclohexamide (used to block translation)
	not significant p-value (stat test: non linear regression (one phase decay) extra sum-of-square F test)
	significant p-value (stat test: non linear regression (one phase decay) extra sum-of-square F test)

Figure 8B FRAP on TUBB3 ex vivo wt, mut, Sema3A

Row stat (TUBB3 ex vivo)																		
Time (min)	TUBB3 wt			TUBB3 wt + Sema3A			TUBB3 mut			TUBB3 mut + Sema3A			no UTR		TUBB3 mut + Sema3A+CHX			
	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N
0	0	0	13	0	0	13	0	0	14	0	0	13	0	0	12	0	0	12
1	2.50592	0.4012613	13	1.446142	0.2745405	13	2.33751	0.32876	13	3.0218	0.62833	13	2.67979	0.65681	12	2.1405	0.79195	11
2	6.13285	0.9911861	13	3.300992	0.5570537	13	5.84861	0.46448	14	6.4668	1.14752	13	4.71989	1.08992	12	4.26886	1.03421	12
3	8.81221	1.256961	13	4.916978	0.8284875	13	9.40548	0.8229	14	9.24004	1.51246	13	6.17856	1.14342	12	6.04311	1.24732	12
4	11.0612	1.529498	13	6.826206	1.025047	13	12.1202	1.0693	14	12.3538	1.99995	13	7.46503	1.16098	12	7.47277	1.30096	12
5	13.1305	1.514512	13	7.988617	1.145495	13	15.0308	1.39078	14	14.9151	2.39579	13	8.5065	1.18185	12	9.22024	1.51615	12
6	15.0876	1.815403	13	9.514845	1.50486	13	16.7216	1.60893	14	17.851	3.21942	13	9.65821	1.17684	12	10.9307	1.75259	12
7	16.9455	1.973082	13	10.1569	1.559974	13	19.32	1.82176	14	19.0347	3.18118	13	10.7333	1.19621	12	11.8471	1.80548	12
8	18.4625	2.068384	13	11.14339	1.757085	13	21.6267	2.16088	14	20.594	3.22487	13	11.4387	1.16719	12	12.9442	1.86438	12
9	19.9846	2.078886	13	11.8431	1.770227	13	23.1127	2.37017	14	22.0621	3.20439	12	12.2498	1.17269	12	13.9739	1.87017	12
10	21.8549	2.309156	13	12.31905	1.809778	13	24.1384	2.23368	14	23.1503	3.08075	12	13.2423	1.21663	12	14.7743	1.78562	12

p-values in summary

	TUBB3 wt	TUBB3 wt + Sema3A	TUBB3 mut	TUBB3 mut + Sema3A	TUBB3 mut + Sema3A + CHX	no UTR
TUBB3 wt	X	<0.0001	0.0514	0.3533	<0.0001	<0.0001
TUBB3 wt + Sema3A		X	<0.0001	<0.0001	0.0934	0.5749
TUBB3 mut			X	0.9393	<0.0001	<0.0001
TUBB3 mut + Sema3A				X	<0.0001	<0.0001
TUBB3 mut + Sema3A + CHX					X	0.3343
no UTR						X

Figure 8C FRAP on TUBB3 ex vivo isolated axons (with or without Sema3A)

Row stat (TUBB3 ex vivo isolated axons)						
Time (min)	TUBB3 mut - isolated ax			TUBB3 mut + Sema3A - isolated ax		
	Mean	SEM	N	Mean	SEM	N
0	0	0	12	0	0	13
1	4.51123	0.7153731	11	3.54234	0.7032316	13
2	9.25706	1.29706	12	7.189637	1.327873	13
3	13.1272	1.853204	12	10.40648	1.872004	13
4	14.9668	2.136281	12	13.3078	2.633621	13
5	17.9374	2.599054	12	15.15231	2.928984	13
6	18.9113	3.096876	12	16.8469	3.17298	13
7	21.0354	3.15222	12	18.56586	4.03555	12
8	22.2837	3.247731	12	20.30212	4.546017	12
9	23.1159	3.577128	12	22.07575	5.734881	11
10	23.9057	3.659397	12	22.5225	5.829574	11

p-values in summary

TUBB3 mut vs TUBB3 mut + Sema3A	0.5053
---------------------------------	--------

Figure 8D FRAP on TUBB3 ex vivo co-MO vs MO isolated axons

Row stat (TUBB3 ex vivo co-MO and MO isolated axons)						
Time (min)	TUBB3_co-MO_Sema3A			TUBB3_MO_Sema3A		
	Mean	SEM	N	Mean	SEM	N
0	0	0	14	0	0	16
1	4.59781	1.07317	14	6.64088	0.965031	16
2	7.44063	1.368251	14	12.30703	1.922383	16
3	9.4997	1.442414	14	16.22865	2.614181	16
4	10.349	1.607571	14	18.71679	3.020975	16
5	11.333	1.79889	14	21.44941	3.649506	16
6	11.8003	1.982891	14	23.25229	3.823252	16
7	12.217	1.914643	14	24.24964	4.055425	16
8	12.2897	1.97432	14	25.48059	4.434817	16
9	13.3874	2.263137	13	25.66678	4.602938	14
10	12.982	2.165362	13	26.1972	4.817541	14

p-values in summary

TUBB3 co-MO Sema3A vs TUBB3 MO Sema3A	< 0.0001
--	----------

Figure 8E FRAP on TUBB3 in vivo

Row stat (TUBB3 in vivo)

Time (min)	TUBB3 wt			TUBB3 mut			no UTR		
	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N
0	0	0	13	0	0	14	0	0	9
1	8.84175	2.096109	13	10.50249	1.738892	13	5.4729	1.03033	9
2	13.3824	1.693376	13	15.60584	1.948999	14	9.90023	1.37042	9
3	17.4597	1.886495	13	19.88032	2.665493	14	11.5084	1.45658	9
4	19.883	1.94056	13	23.72907	2.411433	14	14.3376	1.94064	8
5	21.0749	2.295186	13	23.1803	2.538608	14	14.9161	1.87033	9
6	21.5764	2.424325	13	25.67823	2.720879	14	15.7376	2.13055	9
7	25.2002	2.020976	13	29.50884	3.126867	13	15.0209	2.3255	9
8	26.7382	2.491745	13	29.82323	3.457293	14	14.8078	3.18307	9
9	25.124	2.787736	13	30.73869	2.977951	13	15.495	2.95481	9
10	24.1259	2.958345	13	30.71744	3.232704	14	15.0698	2.35701	8

p-values in summary

TUBB3 wt vs TUBB3 mut in vivo	0.005
TUBB3 mut vs no UTR	< 0.0001
TUBB3 wt vs no UTR	< 0.0001

Figure 8F FRAP on APP ex vivo wt, mut, Sema3A

Row stat (APP ex vivo)

Time (min)	APP wt			APP wt + Sema3A			APP mut			APP mut + Sema3A		
	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N
0	0	0	13	0	0	13	0	0	13	0	0	13
1	3.06499	0.5546552	13	2.013558	0.3798081	10	2.59412	0.4422	13	1.58939	0.236	12
2	6.22268	0.8908166	13	5.431235	1.828498	12	5.9503	0.84332	13	3.77145	0.55665	12
3	8.7181	1.057341	13	6.878763	1.926334	13	8.75697	1.08959	13	5.46668	0.84118	13
4	11.2905	1.45505	13	8.311195	2.171235	13	11.2054	1.24287	13	6.67045	1.00075	13
5	13.3784	1.660904	13	9.544214	2.198201	13	13.4674	1.50908	13	7.8063	1.13829	13
6	14.8401	1.777831	13	10.7862	2.380333	13	15.3657	1.48099	13	9.10498	1.34296	13
7	16.8546	1.992732	13	11.74579	2.386151	13	16.808	1.77214	13	9.60796	1.115	13
8	18.2196	2.026422	13	12.28008	2.379899	13	18.6268	1.78968	13	10.8989	1.61362	13
9	20.282	2.295962	13	12.59671	2.169909	13	20.199	1.82439	13	11.7844	1.69851	13
10	21.4707	2.354713	13	13.19894	2.252368	13	21.6488	1.89524	13	12.7405	1.86603	13

p-values in summary

	APP wt	APP wt + Sema3A	APP mut	APP mut + Sema3A
APP wt	X	< 0.0001	0.9964	< 0.0001
APP wt + Sema3A		X	< 0.0001	0.2761
APP mut			X	< 0.0001
APP mut + Sema3A				X

Figure 8G FRAP on THBS1 ex vivo wt, mut, Sema3A

Row stat (THBS1 ex vivo)

Time (min)	THBS1 wt			THBS1 wt + Sema3A			THBS1 mut			THBS1 mut + Sema3A		
	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N	Mean	SEM	N
0	0	0	11	0	0	11	0	0	11	0	0	11
1	1.4887	0.4056773	11	1.283874	0.3060505	11	1.3148	0.38742	9	1.43836	0.28673	11
2	3.35334	0.8308482	11	3.308103	0.5122092	11	2.96796	0.73881	10	3.20101	0.64298	11
3	4.69851	1.020154	11	4.739583	0.7240555	11	4.03707	0.887	11	4.78531	0.81156	11
4	5.78901	1.0697	11	6.030899	0.9836724	11	5.25187	1.11819	11	6.05334	1.00019	11
5	6.78695	1.177381	11	6.933337	1.11027	11	6.93433	1.43315	11	7.42004	1.15918	11
6	7.58698	1.153931	11	7.92713	1.264883	11	8.27696	2.02141	11	8.40159	1.2521	11
7	8.64252	1.297878	11	8.874183	1.567088	11	8.90699	1.9376	11	8.80566	1.2844	11
8	9.20658	1.368006	11	10.26145	1.738127	10	9.67092	1.96423	11	9.76673	1.56158	11
9	9.7534	1.458212	11	10.5959	1.756881	10	10.7984	2.40897	11	10.1871	1.56256	11
10	9.98889	1.405221	11	11.54858	2.112967	10	11.0498	2.53158	11	11.1663	1.75533	11

p-values in summary

	THBS1 wt	THBS1 wt + Sema3A	THBS1 mut	THBS1 mut + Sema3A
THBS1 wt	X	0.6645	0.8295	0.7958
THBS1 wt + Sema3A		X	0.9884	0.9804
THBS1 mut			X	0.9606
THBS1 mut + Sema3A				X

Figure 8F FRAP on ACTB ex vivo wt

Row stat (ACTB ex vivo)

Time (min)	Venus_ACTB			Venus_ACTB_CHX		
	Mean	SEM	N	Mean	SEM	N
0	0	0	9	0	0	9
1	8.85427	2.18773	9	5.441092	0.9026811	9
2	14.7127	3.133608	9	8.888219	1.167582	9
3	19.885	3.669384	9	12.14045	1.413548	9
4	23.5937	3.967617	9	14.96311	1.76993	9
5	26.7153	3.859723	9	17.5536	2.23044	9
6	28.4583	4.485406	9	18.46542	2.493013	9
7	30.9568	4.540555	9	19.42891	2.740475	9
8	35.3712	5.371607	9	20.69722	2.634823	9
9	38.278	5.975838	9	22.74909	2.610709	9

p-values in summary

ACTB vs ACTB +
CHX < 0.0001