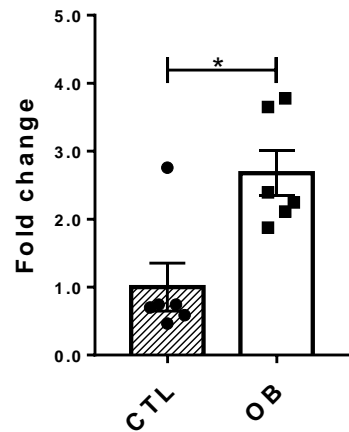


Figure 5A – *Fasn* and *Scd1* – CTL x OB

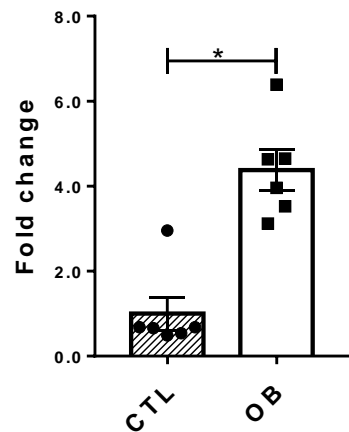
Fasn* / *Gapdh



	CT	OB
	Y	Y
	2.757037	2.113132
	0.742880	1.874992
	0.589219	3.650144
	0.464488	2.244212
	0.744459	3.778088
	0.701917	2.395698

Table Analyzed	ct FASN
Column B	OB
vs.	vs.
Column A	CTL
Unpaired t test with Welch's correction	
P value	0.0064
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
Welch-corrected t, df	t=3.433 df=9.972

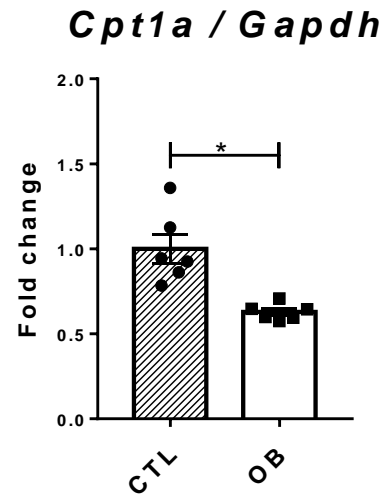
Scd1* / *Gapdh



	CT	OB
	Y	Y
	2.954431	4.632162
	0.486890	3.116506
	0.656133	4.648530
	0.541587	6.389849
	0.678930	3.959544
	0.682029	3.524946

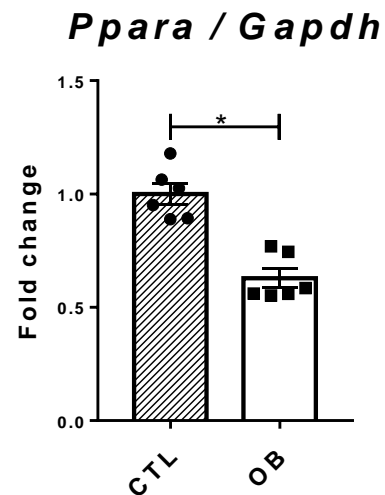
Table Analyzed	ct SCD1
Column B	OB
vs.	vs.
Column A	CT
Mann Whitney test	
P value	0.0022
Exact or approximate P value?	Exact
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,B	21 , 57
Mann-Whitney U	0

Figure 5A – *Cpt1a* and *Ppara* – CTL x OB



CT	OB
Y	Y
1.126002	0.595451
0.783594	0.644532
1.359094	0.707865
0.861897	0.647079
0.925503	0.599423
0.943910	0.574735

Table Analyzed	ct CPT1
Column B	OB
vs.	vs.
Column A	CT
Unpaired t test	
P value	0.0017
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=4.236 df=10

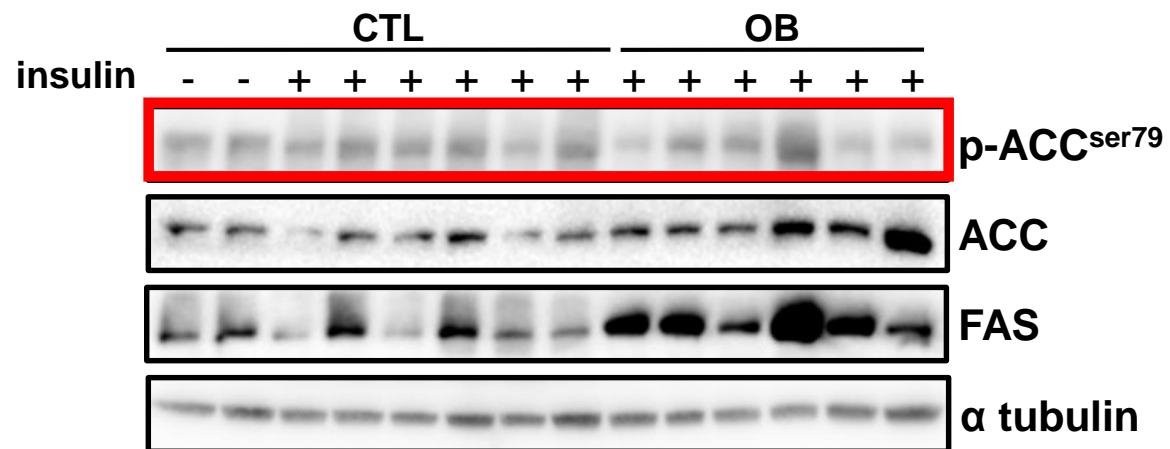


CT	OB
Y	Y
1.024757	0.744226
1.178579	0.769224
1.063513	0.560724
0.888538	0.551577
0.893300	0.584818
0.951313	0.559781

Table Analyzed	ct PPARa
Column B	OB
vs.	vs.
Column A	CT
Mann Whitney test	
P value	0.0022
Exact or approximate P value?	Exact
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,B	57 , 21
Mann-Whitney U	0

Figure 5B and C: Phospho-ACC^{ser49} - CTL x OB

Quantification

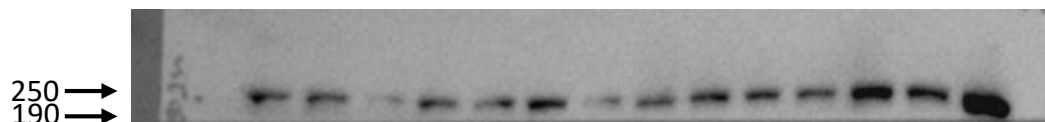


	p-ACC		ACC total		p-ACC	
	Segment	Pixel Total	Segment	Pixel Total	Relação (total)	% of control
CTL	1	24406	1	23210	1,051529513	126,771418
	2	39929	2	52325	0,763096034	91,998147
	3	32715	3	44280	0,738821138	89,0715881
	4	44839	4	65576	0,683771502	82,4348552
	5	16150	5	24374	0,662591286	79,8813881
	6	55260	6	51309	1,077004034	129,842603
OB	7	5471	7	74941	0,073004097	8,80130587
	8	27386	8	64382	0,425367339	51,2818901
	9	33239	9	67905	0,489492674	59,0127807
	10	94079	10	126579	0,74324335	89,6047259
	11	11225	11	95122	0,11800635	14,2267356
	12	10298	12	173176	0,059465515	7,16910707

Phospho-ACC^{ser79}



Total ACC

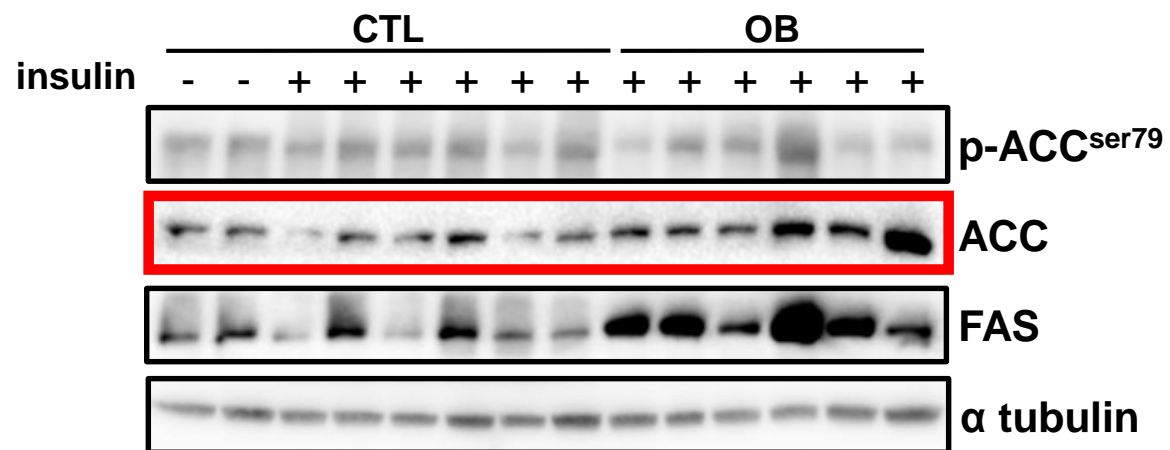


PRISM analysis

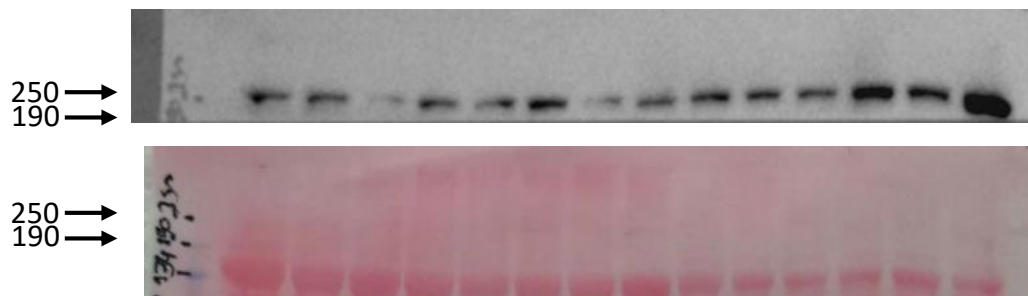
CTL	OB
Y	Y
126.77141800	8.80130587
91.99814700	51.28189010
89.07158810	59.01278070
82.43485520	89.60472590
79.88138810	14.22673560
129.84260300	7.16910707

Table Analyzed	ct p-ACC / Total ACC
Column B	OB
vs.	vs.
Column A	CTL
Unpaired t test	
P value	0.0038
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.74 df=10

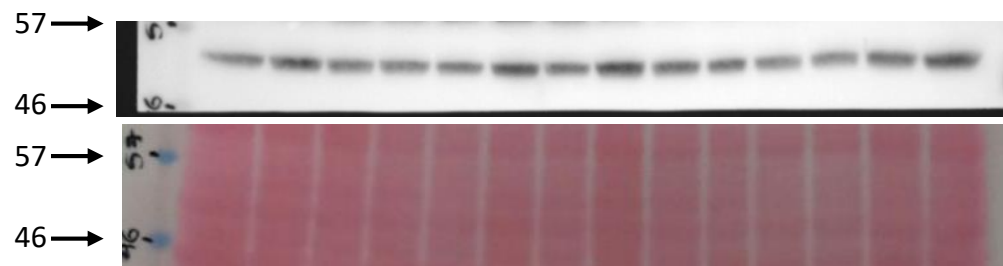
Figure 5B and D: total ACC - CTL x OB



Total ACC



Alpha tubulin



Quantification

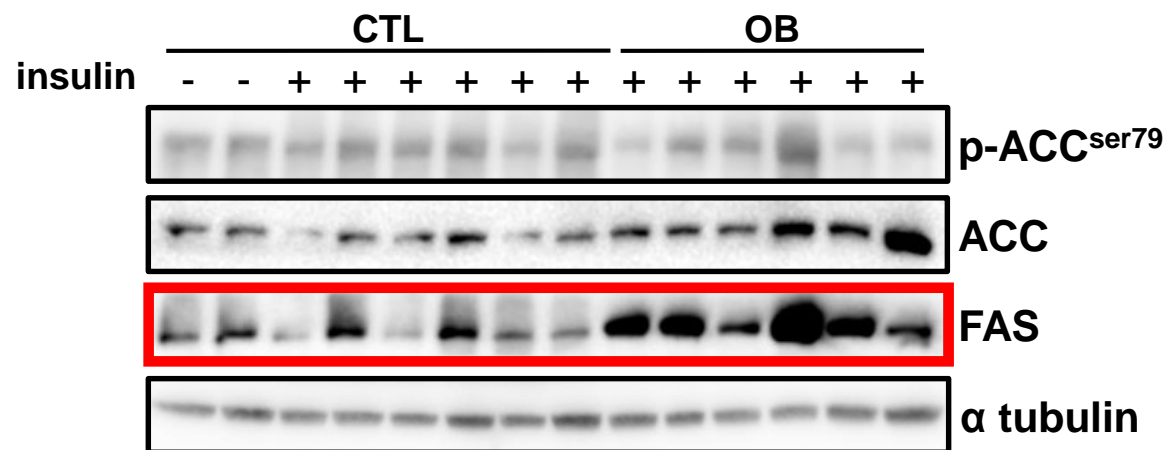
	ACC total		ACC total		alpha tub	
	16		Relação	% of control	16	
	Segment	Pixel Total			Segment	Pixel Total
CTL	1	23210	0,20398478	65,3281013	1	113783
	2	52325	0,4596	147,191351	2	113849
	3	44280	0,39090363	125,190676	3	113276
	4	65576	0,37066178	118,708027	4	176916
	5	24374	0,18403805	58,93997	5	132440
	6	51309	0,26429138	84,6418749	6	194138
OB	7	74941	0,51565027	165,141993	7	145333
	8	64382	0,56111208	179,701579	8	114740
	9	67905	0,643869	206,205284	9	105464
	10	126579	1,22616049	392,689776	10	103232
	11	95122	0,64323341	206,001731	11	147881
	12	173176	0,91891519	294,291492	12	188457

PRISM analysis

CTL	OB
Y	Y
65.3281013	165.141993
147.1913510	179.701579
125.1906760	206.205284
118.7080270	392.689776
58.9399700	206.001731
84.6418749	294.291492

Table Analyzed	ct total ACC / alpha tubulin
Column B	OB
vs.	vs.
Column A	CTL
Unpaired t test	
P value	0.0043
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.668 df=10

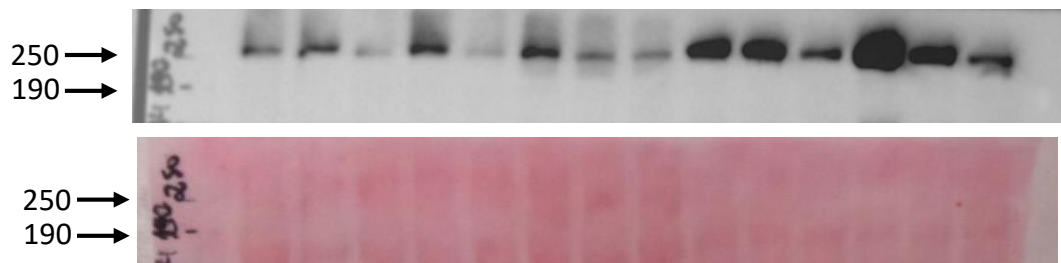
Figure 5B and E: FAS - CTL x OB



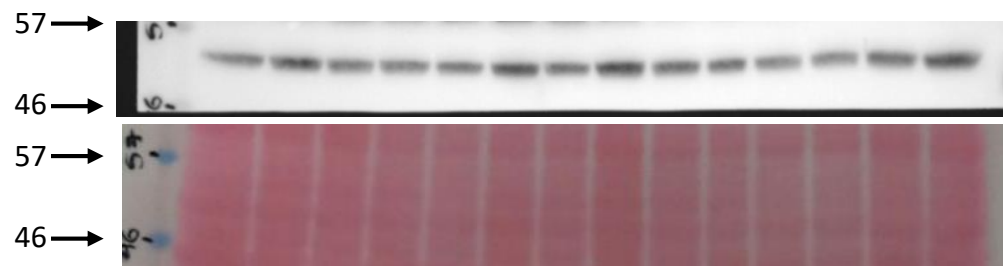
Quantification

		FASS		FASS		alpha tub	
		29		Relação	% of control	16	
		Segment	Pixel Total			Segment	Pixel Total
CTL	1	26093	0,22932248	43,2204378	1	113783	
	2	118360	1,03962266	195,937816	2	113849	
	3	32492	0,28683922	54,0606257	3	113276	
	4	126821	0,71684302	135,103497	4	176916	
	5	80337	0,60659166	114,324409	5	132440	
	6	59078	0,30430931	57,3532141	6	194138	
OB	7	143852	0,98980961	186,549545	7	145333	
	8	157538	1,37299983	258,769454	8	114740	
	9	95648	0,90692559	170,928382	9	105464	
	10	253215	2,45287314	462,293317	10	103232	
	11	171517	1,15983122	218,593539	11	147881	
	12	116308	0,61715935	116,316103	12	188457	

FAS



Alpha tubulin

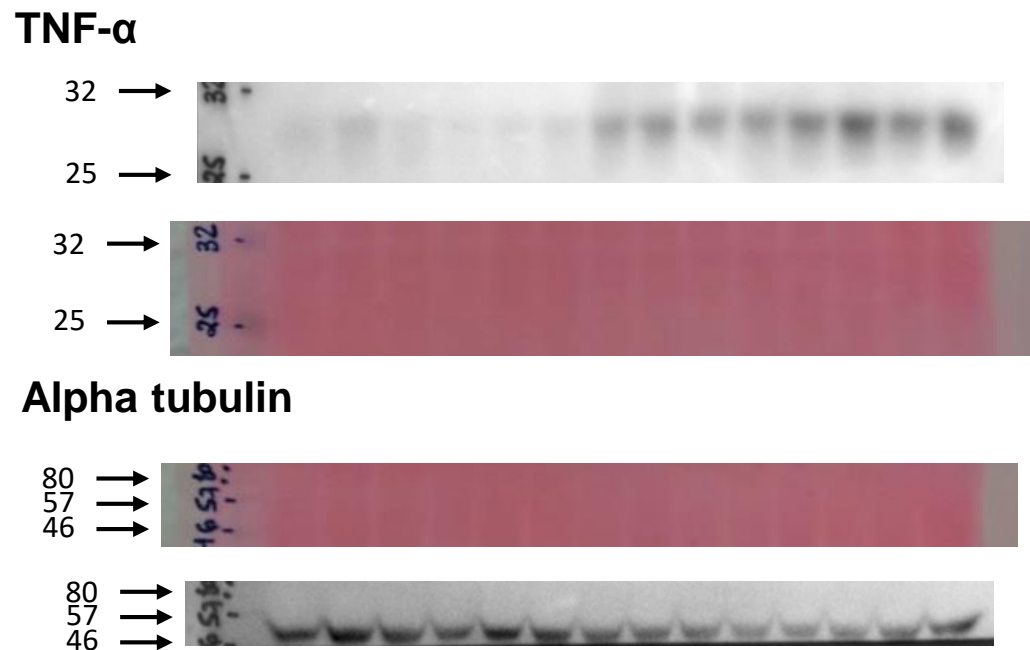
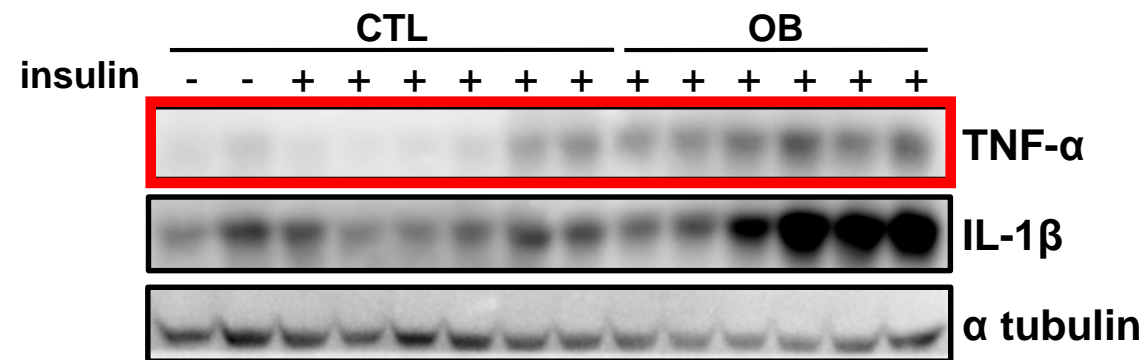


PRISM analysis

CTL	OB
Y	Y
43.2204378	186.5495450
195.9378160	258.7694540
54.0606257	170.9283820
135.1034970	462.2933170
114.3244090	218.5935390
57.3532141	116.3161030

Table Analyzed	ct FAS / alpha tubulin
Column B	OB
vs.	vs.
Column A	CTL
Unpaired t test	
P value	0.0334
P value summary	*
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=2.464 df=10

Figure 5F and G: TNF- α - CTL x OB



Quantification

	TNFa		TNFa		alpha tub	
	membrane 44		ratio	% of control	44	
	Segment	Pixel Total			Segment	Pixel Total
CTL	1	18340	0,17	29,49	1	111073
	2	7325	0,08	13,47	2	97146
	3	11288	0,09	16,92	3	119159
	4	26826	0,25	45,46	4	105378
	5	100375	1,15	205,96	5	87034
	6	127050	1,62	288,71	6	78588
OB	7	108309	1,45	258,18	7	74919
	8	142801	2,62	467,93	8	54499
	9	183258	4,38	782,64	9	41816
	10	221911	5,60	1000,65	10	39604
	11	175208	3,31	590,74	11	52966
	12	179993	2,29	409,76	12	78445

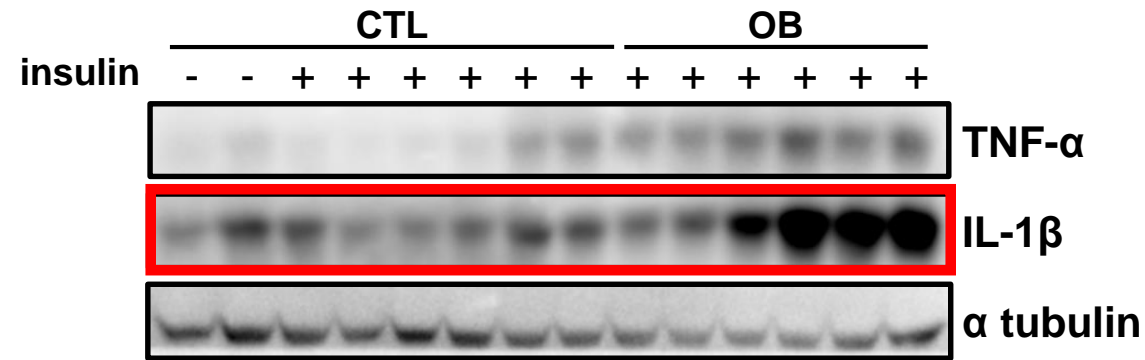
PRISM analysis

CTL	OB
Y	Y
29.49000000	258.18000000
13.47000000	467.93000000
16.92000000	782.64000000
45.46000000	1000.65000000
205.96000000	590.74000000
288.71000000	409.76000000

Table Analyzed	ct TNF-a / alpha tubulin
Column B	OB
vs.	vs.
Column A	CTL
Mann Whitney test	
P value	0.0043
Exact or approximate P value?	Exact
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,B	22 , 56
Mann-Whitney U	1

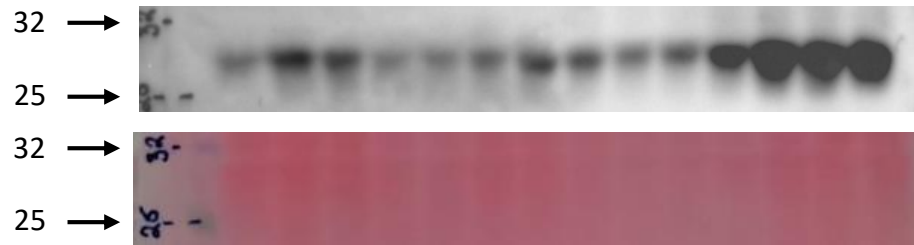
Figure 5F and H: IL-1 β - CTL x OB

Quantification



IL-1b		IL-1b		alpha tub	
membrane 45		ratio	% of control	44	
Segment	Pixel Total			Segment	Pixel Total
1	191535	1,72	100,14	1	111073
2	135241	1,39	80,85	2	97146
3	147856	1,24	72,06	3	119159
4	169465	1,61	93,39	4	105378
5	199573	2,29	133,16	5	87034
6	162929	2,07	120,40	6	78588
7	133386	1,78	103,39	7	74919
8	170696	3,13	181,89	8	54499
9	301189	7,20	418,28	9	41816
10	440098	11,11	645,34	10	39604
11	421857	7,96	462,53	11	52966
12	436851	5,57	323,40	12	78445

IL-1 β



Alpha tubulin



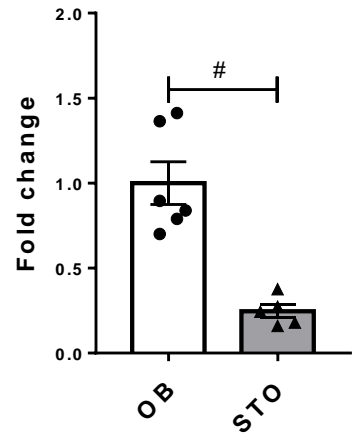
PRISM analysis

CTL	OB
Y	Y
100.14000000	103.39000000
80.85000000	181.89000000
72.06000000	418.28000000
93.39000000	645.34000000
133.16000000	462.53000000
120.40000000	323.40000000

Table Analyzed	ct IL-1b / alpha tubulin
Column B	OB
vs.	vs.
Column A	CTL
Unpaired t test	
P value	0.0102
P value summary	*
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.158 df=10

Figure 5I – *Fasn* and *Scd1* – OB x STO

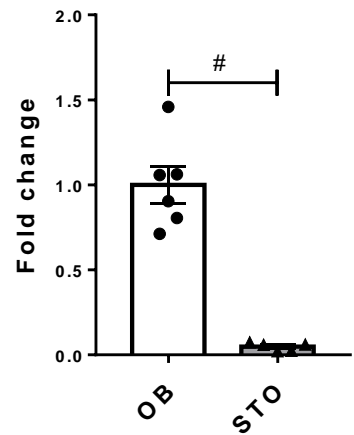
Fasn* / *Gapdh



OB	STO
Y	Y
0.789648	0.272627
0.700658	0.179522
1.364007	0.376643
0.838631	0.243291
1.411818	0.160829
0.895238	

Table Analyzed	\$ FASN
Column B	STO
vs.	vs.
Column A	OB
Unpaired t test with Welch's correction	
P value	0.0013
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
Welch-corrected t, df	t=5.738 df=5.913

Scd1* / *Gapdh

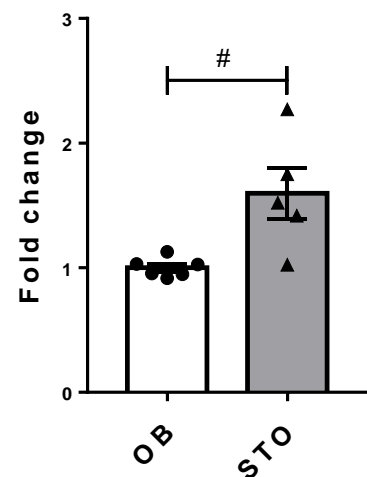


OB	STO
Y	Y
1.057912	0.059753
0.711760	0.021197
1.061650	0.024968
1.459340	0.061717
0.904297	0.074203
0.805041	

Table Analyzed	\$ SCD1
Column B	STO
vs.	vs.
Column A	OB
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=7.962 df=9

Figure 5I – *Cpt1a* and *PPara* – OB x STO

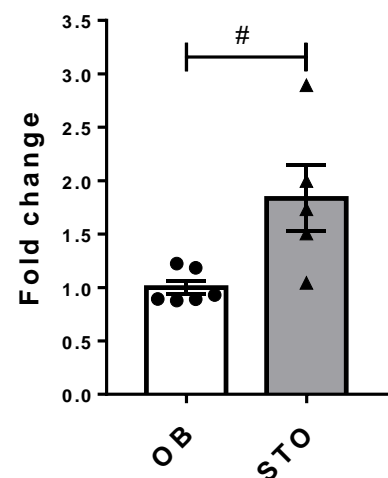
Cpt1a* / *Gapdh



	OB	STO
Y	Y	Y
	0.947897	1.750609
	1.026029	1.417546
	1.126850	2.270411
	1.030083	1.024006
	0.954220	1.522065
	0.914920	

Table Analyzed	\$ CPT1
Column B	STO
vs.	vs.
Column A	OB
Unpaired t test	
P value	0.0115
P value summary	*
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.165 df=9

Ppara* / *Gapdh

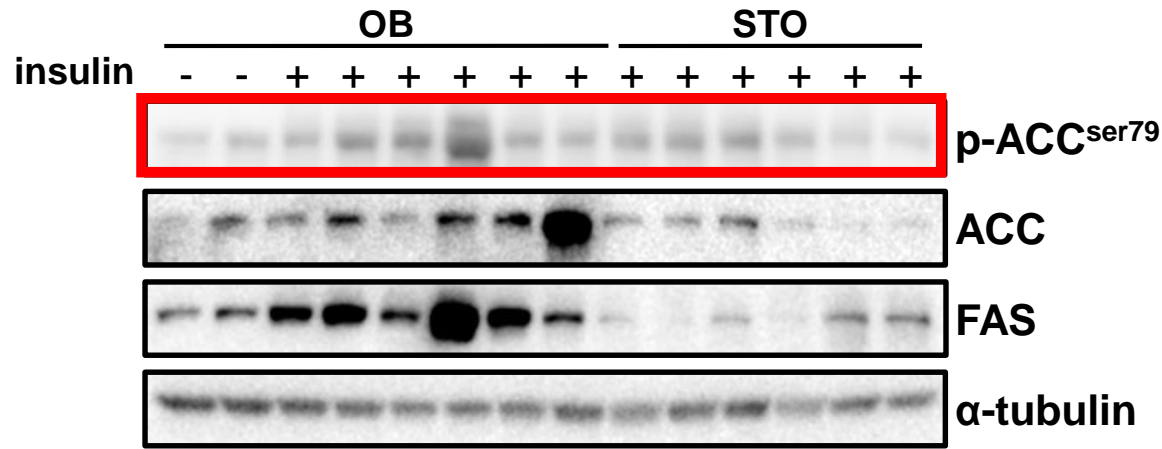


	OB	STO
Y	Y	Y
	1.184335	1.732544
	1.224115	1.504856
	0.892317	2.894604
	0.877760	1.042434
	0.930658	1.997161
	0.890815	

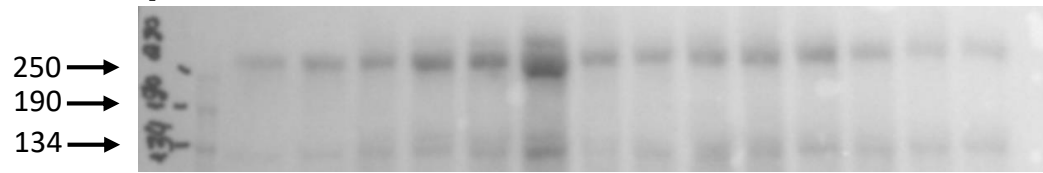
Table Analyzed	\$ PPARa
Column B	STO
vs.	vs.
Column A	OB
Mann Whitney test	
P value	0.0173
Exact or approximate P value?	Exact
P value summary	*
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,B	23 , 43
Mann-Whitney U	2

Figure 5J and K: Phospho-ACC^{ser49} - OB x STO

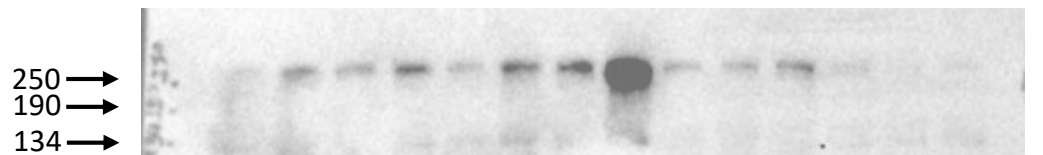
Quantification



Phospho-ACC^{ser79}



Total ACC



	p-ACC		ACC total		p-ACC	
	22		19		Relação (total)	% of control
	Segment	Pixel Total	Segment	Pixel Total		
OB	1	18139	1	61521	0,294842412	66,4448114
	2	41010	2	101462	0,404190732	91,0872245
	3	48719	3	58514	0,832604163	187,633205
	4	109764	4	129769	0,845841457	190,616322
	5	27555	5	123537	0,223050584	50,2660181
	6	19753	6	319047	0,061912508	13,9524192
OBT	7	29156	7	41693	0,699302041	157,592634
	8	35894	8	26285	1,365569717	307,740741
	9	36492	9	52090	0,700556729	157,875387
	10	18288	10	13224	1,382940109	311,655281
	11	8831	11	6474	1,364071671	307,403146
	12	6237	12	9343	0,6675586	150,439026

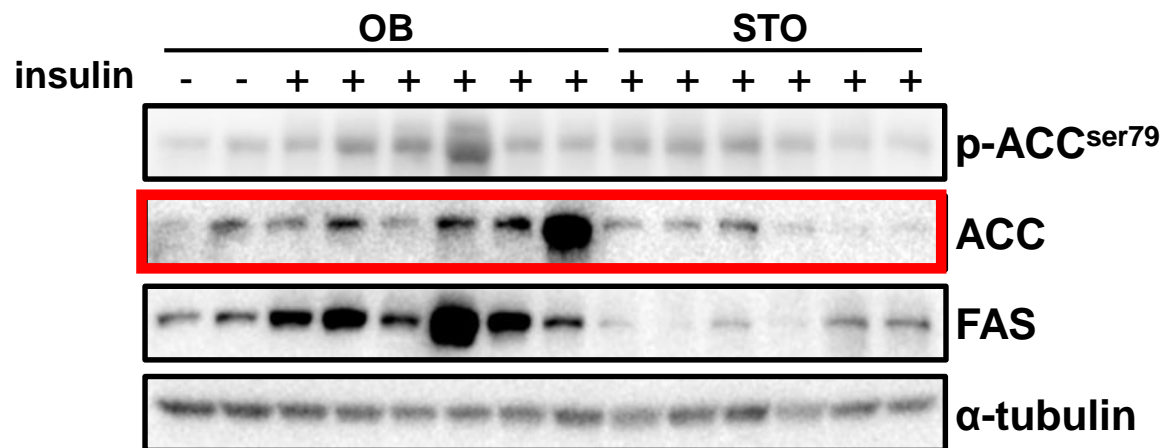
PRISM analysis

	OB	STO
	Y	Y
	66.4448114	157.592634
	91.0872245	307.740741
	187.6332050	157.875387
	190.6163220	311.655281
	50.2660181	307.403146
	13.9524192	150.439026

Table Analyzed	\$ p-ACC / Total ACC
Column B	STO
vs.	vs.
Column A	OB
Unpaired t test	
P value	0.0159
P value summary	*
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=2.896 df=10

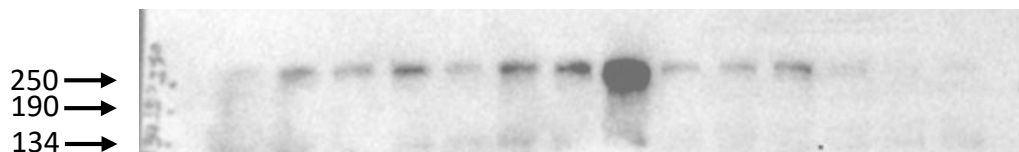
Figure 5J and L: total ACC - OB x STO

Quantification

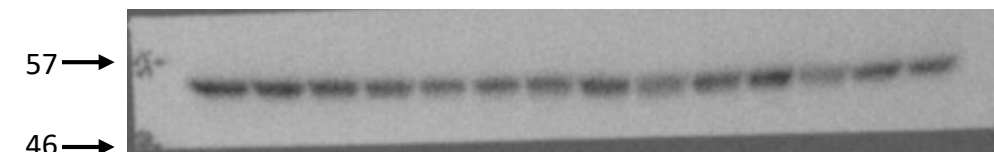


	ACC total		ACC total		alpha tub	
	19		Relação	% of control	18	
	Segment	Pixel Total			Segment	Pixel Total
OB	1	61521	0,8285545	39,6295562	1	74251
	2	101462	1,59732368	76,3995955	2	63520
	3	58514	1,15303066	55,1491706	3	50748
	4	129769	2,38160696	113,91167	4	54488
	5	123537	2,13757722	102,239788	5	57793
	6	319047	4,4464002	212,670219	6	71754
OBT	7	41693	0,75387397	36,0576051	7	55305
	8	26285	0,39946201	19,1061691	8	65801
	9	52090	0,71396264	34,1486559	9	72959
	10	13224	0,28812968	13,7811714	10	45896
	11	6474	0,11180768	5,34773353	11	57903
	12	9343	0,1799326	8,60613141	12	51925

Total ACC



Alpha tubulin

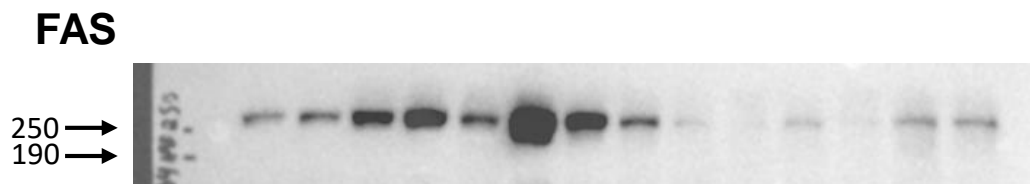
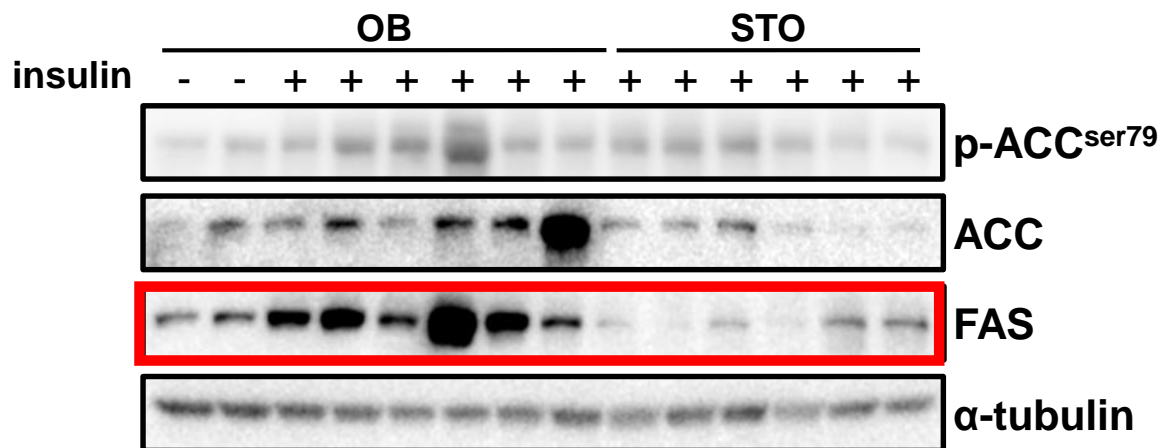


PRISM analysis

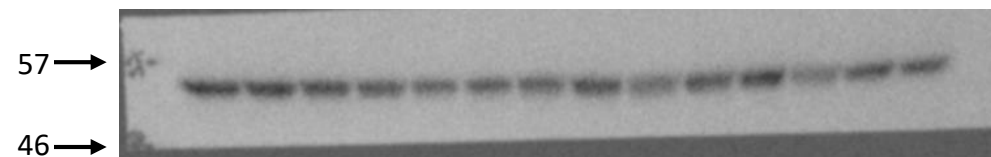
	OB	STO
	Y	Y
	39.62955620	36.05760510
	76.39959550	19.10616910
	55.14917060	34.14865590
	113.91167000	13.78117140
	102.23978800	5.34773353
	212.67021900	8.60613141

Table Analyzed	\$ total ACC / alpha tubulin
Column B	STO
vs.	vs.
Column A	OB
Unpaired t test	
P value	0.0108
P value summary	*
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=3.122 df=10

Figure 5J and M: FAS - OB x STO



Alpha tubulin



Quantification

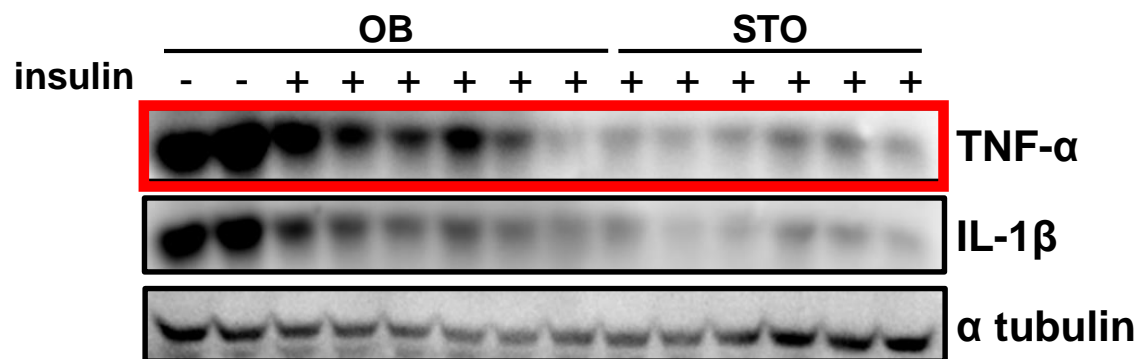
	FASS		FASS		alpha tub	
	Segment	Pixel Total	Relação	% of control	Segment	Pixel Total
OB	1	105313	1,4183378	63,2306862	1	74251
	2	135506	2,13328086	95,1034459	2	63520
	3	93230	1,83711673	81,9002015	3	50748
	4	251971	4,6243393	206,156916	4	54488
	5	144560	2,50134099	111,511875	5	57793
	6	67756	0,94428185	42,0968752	6	71754
OBT	7	11801	0,21338035	9,51267438	7	55305
	8	4752	0,07221775	3,21952762	8	65801
	9	16209	0,22216587	9,90434059	9	72959
	10	7081	0,1542836	6,87809191	10	45896
	11	48816	0,84306513	37,5845489	11	57903
	12	47251	0,90998556	40,5679177	12	51925

PRISM analysis

OB	STO
Y	Y
63.23068620	9.51267438
95.10344590	3.21952762
81.90020150	9.90434059
206.15691600	6.87809191
111.51187500	37.58454890
42.09687520	40.56791770

Table Analyzed	\$ FAS / alpha tubulin
Column B	STO
vs.	vs.
Column A	OB
Mann Whitney test	
P value	0.0022
Exact or approximate P value?	Exact
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
Sum of ranks in column A,B	57 , 21
Mann-Whitney U	0

Figure 5N and O: TNF- α - OB x STO



Quantification

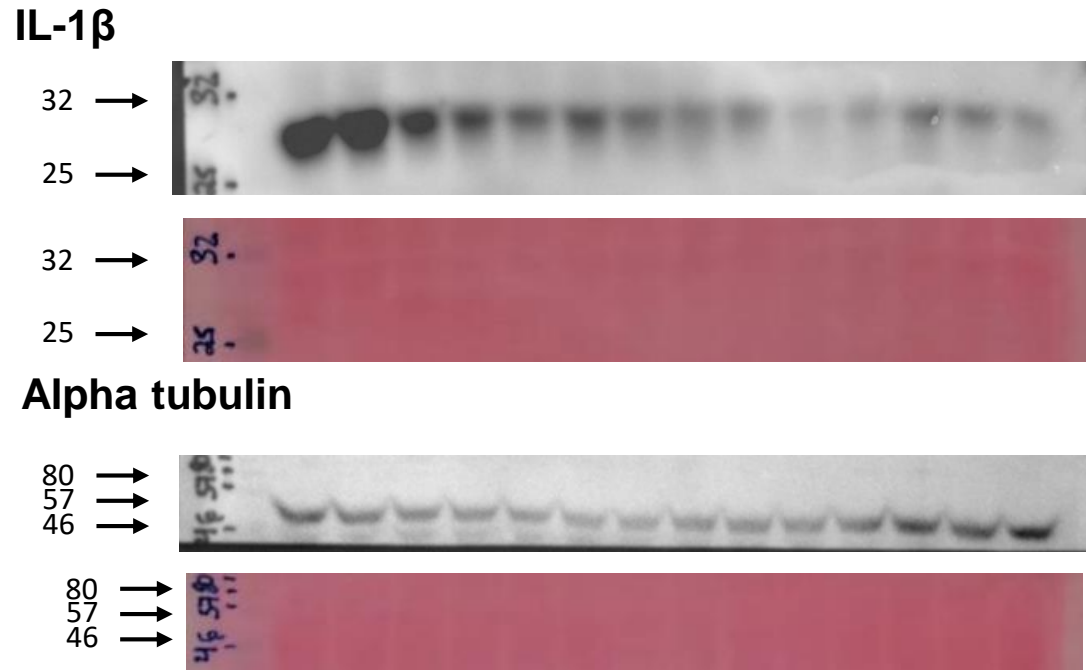
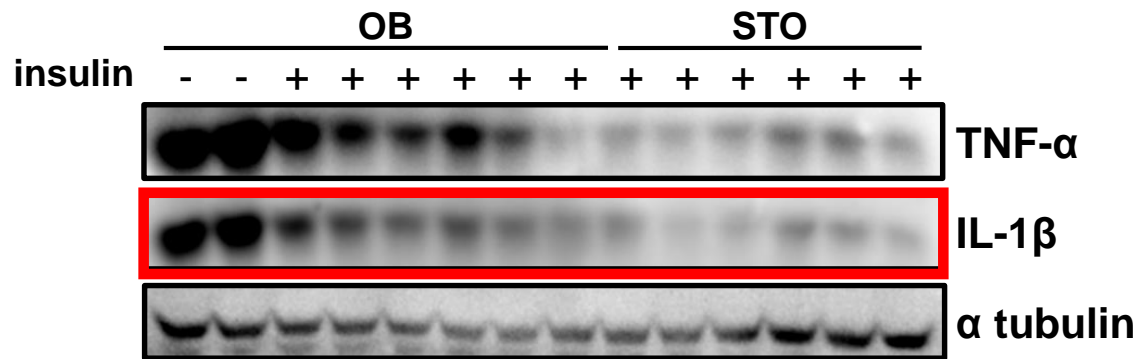
	TNFa		TNFa		alpha tub	
	membrane 46		ratio	% of control	46	
	Segment	Pixel Total			Segment	Pixel Total
OB	1	392539	3,75	119,80	1	104716
	2	299876	3,01	96,34	2	99479
	3	245437	3,16	101,00	3	77663
	4	306894	4,96	158,51	4	61873
	5	193621	3,37	107,72	5	57441
	6	39370	0,52	16,63	6	75666
OBT	7	45475	0,57	18,34	7	79231
	8	28566	0,38	12,15	8	75126
	9	40010	0,38	12,18	9	104954
	10	87883	0,60	19,16	10	146601
	11	74264	0,52	16,59	11	143034
	12	27348	0,19	5,95	12	147000

PRISM analysis

	OB	STO
	Y	Y
	119.80000000	18.34000000
	96.34000000	12.15000000
	101.00000000	12.18000000
	158.51000000	19.16000000
	107.72000000	16.59000000
	16.63000000	5.95000000

Table Analyzed	\$ TNF-a / alpha tubulin
Column B	STO
vs.	vs.
Column A	OB
Unpaired t test	
P value	0.0012
P value summary	**
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=4.495 df=10

Figure 5N and P: IL-1 β - OB x STO



Quantification

IL-1b		IL-1b		alpha tub	
membrane 47		ratio	% of control	46	
Segment	Pixel Total			Segment	Pixel Total
1	216345	2,07	102,13	1	104716
2	182470	1,83	90,68	2	99479
3	148473	1,91	94,51	3	77663
4	167074	2,70	133,49	4	61873
5	133460	2,32	114,86	5	57441
6	98480	1,30	64,34	6	75666
7	56086	0,71	34,99	7	79231
8	3715	0,05	2,44	8	75126
9	11990	0,11	5,65	9	104954
10	43855	0,30	14,79	10	146601
11	29449	0,21	10,18	11	143034
12	6950	0,05	2,34	12	147000

PRISM analysis

OB	STO
Y	Y
102.13000000	34.99000000
90.68000000	2.44000000
94.51000000	5.65000000
133.49000000	14.79000000
114.86000000	10.18000000
64.34000000	2.34000000

Table Analyzed	\$ IL-1b / alpha tubulin
Column B	STO
vs.	vs.
Column A	OB
Unpaired t test	
P value	<0.0001
P value summary	****
Significantly different (P < 0.05)?	Yes
One- or two-tailed P value?	Two-tailed
t, df	t=8.172 df=10