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## Raw data

# Animal experiment results PW12

## Serum CORT

	OD	Y值		CORT	Mean	P value
control	1.922	4. 646864	464.6864	160.9952501	503.8801843	0.017589273
	2.019	3.608105	360.8105	125.0064058		
	1.403	13.999681	1399.9681	485.0329479		
	1.287	17.540553	1754.0553	607.7099992		
	1.467	12.353352	1235. 3352	427.9942334		
	1.444	12.922981	1292.2981	447.7295997		
	1.276	17.92008	1792.008	620.8590917		
	1.372	14.87006	1487.006	515.1880988		
	1.314	16.643639	1664.3639	576.6355168		
	1.217	20. 108202	2010. 8202	696.6687665		
	1.099	25. 411719	2541.1719	880. 4144165		
l	1.385	14. 498871	1449.8871	502. 3278847		
PCE (H)	1.49	11.806784	1180.6784	409.0578385	329.0351754	
	1.508	11.394341	1139.4341	394. 7683383		
	1.629	8.931482	893.1482	309.4401254		
	1.548	10. 523057	1052.3057	364. 5818328		
	1.622	9.060619	906.0619	313.9142059		
	1.889	5. 036961	503.6961	174. 5105508		
	1.449	12.797123	1279.7123	443.3691235		
	1.336	15.947344	1594.7344	552. 5116802		
	1.769	6. 636229	663.6229	229.9187899		
	1.67	8. 204426	820. 4426	284. 2505432		
	1.67	8.204426	820. 4426	284. 2505432		
	1.858	5, 42194	542, 194	187.8485332		

### Serum cholesterol

	OD value	T-CHO	OD (A-B)	HDL-C	OD (A-B)	LDL-C
control	0.124	2.96515	0.045	1.45625588	-0.719	-49.7748092
	0.121	2.8511	0.034	1.011288805	0.047	2.851145038
	0.107	2.3189	0.042	1.334901223	0.046	2.782442748
	0.113	2.54699	0.063	2.184383819	0.042	2. 507633588
	0.18	5.09397	0.044	1.415804327	0.047	2.851145038
	0.122	2.88912	0.047	1.537158984	0.053	3.263358779
	0.122	2.88912	0.04	1.253998119	0.058	3.606870229
	0.142	3.64941	0.069	2. 427093133	0.057	3. 538167939
	0.106	2.28088	0.038	1.173095014	0.045	2.713740458
	0.126	3.04118	0.04	1.253998119	0.046	2.782442748
	0.12	2.81309	0.027	0.72812794	0.05	3.057251908
	0.103	2.16684	0.019	0.404515522	0.046	2.782442748
	OD value	T-CHO	OD (A-B)	HDL-C	OD (A-B)	LDL-C
PCE (H)	0.128	3.11721	0.047	1.537158984	0.053	3.263358779
	0.101	2.09081	0.05	1.658513641	0.047	2.851145038
	0.111	2.47096	0.034	1.011288805	0.045	2.713740458
	0.105	2.24287	0.029	0.779868297	0.047	2.851145038
	0.125	3.00316	0.045	1. 45625588	0.045	2.713740458
	0.123	2.92713	0.036	1.09219191	0.051	3.125954198
	0.118	2.73706	0.034	1.011288805	0.042	2. 507633588
	0.099	2.01478	0.03	0.849482596	-0.047	-3. 60687023
	0.112	2.50897	0.03	0.849482596	0.042	2. 507633588
	0.109	2.39493	0.03	0.849482596	0.061	3.812977099
	0.122	2.88912	0.044	1.415804327	0.042	2. 507633588
	0.12	2.81309	0.038	1.173095014	0.05	3.057251908

## Adrenal cholesterol

	OD value	umol/l	mg/ml	umol/g	mean	p value
control	0.202	525.3333	31.9569	16.4388	10.9105	
	0.206	538.6667	32.6759	16.4851		
	0.146	338.6667	29.0806	11.6458		
	0.145	335.3333	32.6759	10.2624		
	0.19	485.3333	41.6127	11.6631		
	0.158	378.6667	38.1202	9.9335		
	0.119	248.6667	35.244	7.05558		
	0.117	242	32.7786	7.38286		
	0.127	275.3333	33.6004	8.19434		
	0.154	365.3333	36.3739	10.0438		
PCE (H)	0.176	438.6667	46.4407	9.44574	14.0438	0.04731
	0.163	395.3333	46.9543	8.41954		
	0.229	615.3333	39.0447	15.7597		
	0.349	1015.333	54.3503	18.6813		
	0.223	595.3333	35.1412	16.9412		
	0.235	635.3333	43.359	14.6529		
	0.174	432	36.1685	11.9441		
	0.232	625.3333	40.0719	15.6053		
	0.171	422	31.3405	13.465		
	0.187	475.3333	30.6215	15.5229		

## pyroptosis related genes mRNA

CT value	GAPDH	NLRP3	caspase1	IL-1β
control	24.918	28.875	31.743	28.563
	24.644	29.314	33.768	29.478
	25.747	29.947	32.689	30.491
	24.687	29.283	31.476	30.626
	25.994	30.955	33.202	31.288
	24.800	Undetermined	Undetermined	Undetermined
	29.352	33.044	33.791	34.662
	26.456	30.568	34.336	30.927
	25.613	29.422	34.369	30.233
	25.943	30.934	31.532	30.348
PCE (H)	25.931	29.368	33.183	30.690
	26.232	30.120	32.226	30.757
	25.866	30.183	32.230	30.936
	26.584	30.546	32.964	30.559
	27.677	30.689	32.907	32.936
	26.499	29.935	31.137	Undetermined
	26.997	30.655	Undetermined	31.239
	25.224	29.732	32.560	30.000

Steroid synthase

CT value	gapdh	StAR	P450SCC	3β-hsd	P450C11	P450c21
control	26.70980072	23.5342083	24.82452202	22.76723671	24.58964348	19.4345340
	26.76150894	23.74964523	24.96427917	23.24964333	24.32879829	18.4672508
	27.47513199	24.88536072	25.77208328	23.85793495	24.9043026	18.4186973
	26.94939232	24.11428833	25.50727272	23.5714798	24.41363716	19.7795772
	28.25749397	25.53101921	26.60148239	24.71138	25.35650063	21.1374549
	29.00542068	27.07532692	28.23365784	26.26041412	26.94841194	20.5581550
	28.92080498	26.92521667	27.68964195	25.63116074	26.51814461	20.4365863
	27.96419525	25.55089569	26.81922722	25.24570656	25.88132095	19.8610076
PCE (H)	27.25138283	25.2145443	25.96102676	24.90998077	24.80116501	20.0020523
	27.25397873	24.83982582	26.14554977	24.84861565	24.5789505	19.6813907
	26.68039894	24.38255119	25.45675659	23.98752403	24.88483658	20.268999
	27.56822777	24.98369598	25.95149231	24.94028664	24.48167801	19.8372783
	28.52040482	26.93882942	27.63225937	25.5931015	26.57647896	19.2588615
	26.25342178	24.29094315	25.48207512	23.44635582	24.82446671	20.3766784
	28.77059174	26.32820435	27.66102562	25.23737526	25.61654854	20.6803295
	26.21481133	24.04792023	25.42037773	23.90733337	24.10817909	19.9396648

	OD	TCH	OD (A-B)	HDL-C	OD (A-B)	LDL-C
control	0.1340	2.2052	0.0100	0.7364	0.0580	1.1918
	0.1380	2.3032	0.0040	0.2455	0.0900	1.9397
	0.1020	1.4211	0.0090	0.6545	0.0800	1.7060
	0.0930	1.2006	0.0070	0.4909	0.0510	1.0283
	0.1100	1.6172	0.0020	0.0818	0.0620	1.2853
	0.1110	1.6417	0.0120	0.9000	0.0340	0.6310
	0.1240	1.9602	0.0110	0.8182	0.0520	1.0516
	0.1250	1.9847	0.0010	0.0000	0.0600	1.2386
	0.0990	1.3476	0.0060	0.4091	0.0610	1.2620
	0.1510	2.6218	0.0090	0.6545	0.0290	0.5141
	0.1050	1.4946	0.0050	0.3273	0.0810	1.7293
	0.1200	1.8622	0.0100	0.7364	0.0510	1.0283
PCE (H)	0.1250	1.9847	0.0080	0.5727	0.0760	1.6125
	0.1110	1.6417	0.0020	0.0818	0.0680	1.4255
	0.1490	2.5727	0.0120	0.9000	0.0890	1.9163
	0.1480	2.5482	0.0090	0.6545	0.1420	3.1549
	0.1240	1.9602	0.0070	0.4909	0.0520	1.0516
	0.1450	2.4747	0.0110	0.8182	0.0600	1.2386
	0.1550	2.7198	0.0130	0.9818	0.0710	1.4957
	0.1410	2.3767	0.0110	0.8182	0.0600	1.2386
	0.1300	2.1072	0.0050	0.3273	0.1200	2.6408
	0.0980	1.3231	0.0190	1.4727	0.0720	1.5190
	0.1280	2.0582	0.0060	0.4091	0.1670	3.7391
	0.1330	2.1807	0.0060	0.4091	0.2870	6.5435

## pyroptosis related genes mRNA

CT value	GAPDH	NLRP3	CASPAS1	IL-1B
control	18.732	29.228	24.330	25.420
	19.223	29.093	25.083	25.451
	20.811	29.647	25.909	25.837
	19.051	29.580	25.113	25.490
	19.161	27.983	24.096	25.695
	20.378	29.473	24.459	26.828
	18.027	28.283	24.557	24.982
	19.846	28.603	27.977	25.530
	20.088	28.761	27.572	25.100
	18.261	27.813	24.952	28.201
	20.604	29.443	25.893	26.964
	20.713	28.228	24.601	20.517
PCE (H)	19.502	28.619	24.118	25.244
	19.024	27.830	24.348	25.405
	19.889	27.748	24.652	26.275
	18.869	27.479	24.521	25.552
	19.562	28.188	24.518	25.815
	19.428	28.659	25.167	25.740
	19.273	28.579	24.873	26.251
	19.726	28.423	25.362	25.036
	20.571	29.388	25.118	25.917
	20.364	29.712	24.266	25.831
	19.409	28.175	23.796	24.977
	19.410	28.482	23.952	25.130

Steroid synthase

CT value	GAPDH	STAR	P450SCC	3B-HSD	P450C11	P450c21
control	20.47471619	17.53425789	17.43202782	17.15011978	23.87905502	17.4634
	20.99554634	18.47706795	17.97569275	17.6924324	24.757761	17.9385
	22.31005287	20.02508163	19.38490868	19.51009369	24.70849228	19.1671
	20.86128998	17.88785553	17.77908707	17.28054047	25.43833733	17.8115
	20.89234734	18.93950462	18.05666161	17.45256805	25.2241478	18.3788
	21.68744278	19.12591553	18.62331009	18.81793976	25.2084713	19.9348
	20.47610855	17.97405434	17.8068161	16.83669281	24.11563301	17.6898
	21.47116661	18.7313385	18.93245888	18.28665733	25.08877182	18.5037
PCE (H)	20.44626236	17.66409111	17.61244965	17.41981506	24.7925663	17.8768
	20.0471611	17.20898438	16.9842968	16.89297676	24.64724541	17.5451
	20.68138123	18.32073021	18.02910423	17.87515831	23.90757942	18.8338
	19.88544655	17.45817566	17.12493706	16.92728233	24.21875	17.1458
	20.71201897	18.70160866	18.34869194	18.01052856	24.47767067	18.1102
	20.43777084	18.48514938	17.8194313	17.5013752	24.79891968	17.5878
	20.53130531	18.18426514	17.86375809	17.44357681	24.92172432	17.9534
	20.96166611	18.51538658	18.35680962	18.08192825	24.25847626	18.3281

### Adrenal cholesterol

	OD	umol/g	mean	P Value
control	0.0570	10.57610707	8.5468	
	0.0784	12.52579874		
	0.0310	5.577724881		
	0.0467	9.29040274		
	0.0541	7.893849343		
	0.0800	10.8783978		
	0.0405	8.033011893		
	0.0696	11.59512742		
	0.0213	4.32835249		
	0.0406	4.769673276		
PCE (H)	0.0990	10.29280815	13.6418	0.038004089
	0.0440	6.274158232		
	0.1425	15.9556426		
	0.2821	20.02531361		
	0.1626	19.63647748		
	0.0473	7.051897792		
	0.0951	12.85271466		
	0.0543	8.213643849		
	0.2009	26.09098803		
	0.0477	10.02454386		

Adrenal SR-B1

CT Value	GAPDH	SRB1	CT Value	GAPDH	SRB1	CT Value	GAPDH	SRB1
control(GD20)	19.937	20.463	control(PW12)	21.597	18.401	control(PW24)	18.732	16.116
	21.175	22.676		21.791	18.828		19.223	17.385
	20.088	20.647		24.464	21.974		20.811	19.388
	19.904	19.964		20.733	18.107		19.051	16.689
	19.979	19.755		24.132	21.587		19.161	18.226
	18.977	19.657		20.258	17.493		20.378	18.406
	21.340	20.891		23.599	20.996		18.027	16.780
	20.937	19.952		21.026	18.787		19.846	17.002
	19.268	18.723		21.304	18.965		20.088	19.037
	20,520	19,783		22.697	19.556		18,261	15,778
PCE(L)	21.157	21.463		23.515	20.217		20.604	18.223
	22.219	22.119		22.276	19.866		20.713	19,365
	20,990	21.783	PCE(H)	20.334	16.092	PCE(H)	19.502	17,148
	21.129	20.029	10.55%	20.799	16.752	10 No. 10	19.024	16.660
	21.364	21,498		22.122	17,960		19.889	17.144
	22.443	22.264		21.876	17.892		18.869	16.614
	21.243	20.662		22.436	18.506		19.562	16.625
	21.114	21,164		16.322	Undetermined		19.428	17,306
	21.989	21.142		20.429	16.241		19.273	17,198
	19,782	21.742		20.011	16.072		19,726	17.643
PCE(M)	23.960	22.879		20.696	16.617		20.571	17,700
( OL(M)	22.075	21.191		21,906	17.945		20.364	18,201
	22,951	22,154		21.780	17.674		19.409	16.749
	21.391	21.036		22.074	17.832		19.410	17.289
	24.099	22.920						
	23.138	Undetermined						
	23.964	22.900						
	23.964	Undetermined						
	23.091	22.117						
	24.142	24.242						
PCE(H)	23.774	Undetermined						
	23.616	Undetermined						
	24.533	22.989						
	22.327	20.959						
	24.518	22.962						
	23.923	22.596						
	22.540	21.391						
	24.274	22.815						
	22.462	21.325						
	22.609	21.201						

# Enrichment of H3K9ac, H3K14ac and H3K27ac in the promoter region of SR-B1 on GD20, PW12 and PW24

GD20	input(ct)	H3K9(ct)		H3K9 level	PW12	input(ct)	H3K9(ct)		H3K9 level	PW24	input(ct)	H3K9(ct)		H3K9 level
control	11.294	14.428	3.13397	11.391%	control	9.179	16.969	7.789	0.45%	control	9.406	13.044	3.638	8.0344%
	11.153	14.449	3.29654	10.178%		9.041	16.816	7.776	0.46%		9.309	13.116	3.807	7.1453%
	11.117	14.592	3.47532	8.991%		9.121	17.056	7.935	0.41%		9.294	13.036	3.742	7.4741%
PCE(H)	11.708	15.679	3.97121	6.376%	PCE(H)	10.747	17.067	6.320	1.25%	PCE(H)	10.624	14.152	3.527	8.6734%
	11.737	15.668	3.93116	6.555%		10.007	17.219	7.212	0.67%		10.654	14.668	4.014	6.1887%
	11.878	15.699	3.82116	7.075%		10.215	17.134	6.919	0.83%		10.575	14.054	3.479	8.9701%
	input(ct)	H3K14(ct)		H3K14 level		input(ct)	H3K14(ct)		H3K14 level		input(ct)	H3K14(ct)		H3K14 level
control	11.294	16.119	4.82538	3.527%	control	9.179	16.411	7.231	0.67%	control	9.406	14.152	4.746	3.7276%
	11.153	15.981	4.82878	3.519%		9.041	16.462	7.421	0.58%		9.309	14.968	5.659	1.9795%
	11.117	16.130	5.01263	3.098%		9.121	16.520	7.400	0.59%		9.294	15.054	5.760	1.8447%
PCE(H)	11.708	15.139	3.43113	9.271%	PCE(H)	10.747	16.754	6.007	1.55%	PCE(H)	10.624	14.936	4.311	5.0375%
	11.737	15.411	3.67432	7.833%		10.007	16.918	6.911	0.83%		10.654	14.831	4.177	5.5266%
	11.878	15.390	3.5118	8.767%		10.215	16.450	6.235	1.33%		10.575	14.809	4.234	5.3157%
	input(ct)	H3K27(ct)		H3K27 level		input(ct)	H3K27(ct)		H3K27 level		input(ct)	H3K27(ct)		H3K27 level
control	11.294	14.881	3.58781	8.317%	control	9.179	17.612	8.433	0.29%	control	9.406	13.044	3.638	8.0344%
	11.153	14.696	3.54333	8.577%		9.041	17.222	8.181	0.34%		9.309	13.116	3.807	7.1453%
	11.117	14.870	3.75309	7.417%		9.121	17.227	8.106	0.36%		9.294	13.036	3.742	7.4741%
PCE(H)	11.708	16.105	4.39782	4.744%	PCE(H)	10.747	16.823	6.075	1.48%	PCE(H)	10.624	14.898	4.273	5.1713%
	11.737	16.230	4.49313	4.441%		10.007	16.618	6.611	1.02%		10.654	14.832	4.179	5.5225%
	11.878	16.428	4.55024	4.268%		10.215	16.622	6.407	1.18%		10.575	14.895	4.320	5.0072%
	input(ct)	IgG(ct)		IgG level		input(ct)	IgG(ct)				input(ct)	IgG(ct)		
control	11.294	24.546	13.2528	0.010%	control	9.179	22.921	13.742	0.01%	control	9.406	25.594	16.188	0.0013%
	11.153	24.488	13.3356	0.010%		9.041	22.781	13.740	0.00%		9.309	26.433	17.124	0.0007%
	11.117	24.487	13.3702	0.009%		9.121	23.435	14.315	0.00%		9.294	24.676	15.382	0.0023%
PCE(H)	11.708	22.818	11.1105	0.045%	PCE(H)	10.747	23.844	13.096	0.01%	PCE(H)	10.624	22.859	12.234	0.0208%
	11.737	22.874	11.1376	0.044%		10.007	25.916	15.909	0.01%		10.654	22.215	11.561	0.0331%
	11.878	22,996	11,1182	0.045%		10,215	25,936	15,721	0.00%		10.575	22.978	12,403	0.0185%

The concentration of serum corticosterone on GD20

GD20			C*50-fold dilution				
	Y值(OD)	X值	(ng/ml)	nean (ng/ml)		SEM	P value
control	1.703	7.676708	383.8354	425.8068154	66.7201269	18.50483375	
	1.773	6.764577	338.22885				
	1.575	9.556889	477.84445				
	1.562	9.765273	488.26365				
	1.676	8.049145	402.45725				
	1.615	8.936962	446.8481				
	1.625	8.786799	439.33995				
	1.711	7.568641	378.43205				
	1.471	11.328169	566.40845				
	1.657	8.318591	415.92955				
	1.634	8.653242	432.6621				
	1.605	9.089016	454.4508				
	1.818	6.21576	310.788				
PCE(L)	1.589	9.336327	466.81635	506.907655	71.1250463	21.44500835	0.0105171
	1.65	8.419442	420.9721				
	1.45	11.71697	585.8485				
	1.506	10.704484	535.2242				
	1.831	6.062303					
	1.707	7.622546	381.1273				
	1.579	9.493468	474.6734				
	1.44	11.906136	595.3068				
	1.517	10.514469	525.72345				
	1.536	10.192734	509.6367				
	1.463	11.474955	573.74775				
PCE (M)	1.485	11.075133	553,75665	603. 5097333	144.452179	41.69975232	0.0005595
	1.486	11.057244	552.8622				
	1.546	10,026607	501, 33035				
	1.562	9.765273	488.26365				
	1.436	11.982547	599, 12735				
	1,431	12.078667	603, 93335				
	1,368	13, 35053	667.5265				
	1.308	14.676754	733.8377				
	1,215	16,993489	849, 67445				
	1.528	10.327217	516, 36085				
	1.751	7.043291	352, 16455				
	1.235	16.465584	823, 2792				
PCE (H)	1.319	14. 424505	721, 22525	628 8691082	98.050718	28.30480421	7 0728-06
	1. 421	12. 272954	613.6477	020.0001000	50.000110	20.00400421	1.0102 00
	1.657	8.318591	415, 92955				
	1.584	9.414646	470, 7323				
	1.406	12.569614	628.4807				
	1.385	12. 99583	649.7915				
	1.355	13. 627829	681, 39145				
	1.408	12. 529691	626, 48455				
	1.333	14.109531	705. 47655				
	1.344	13.866692	693.3346				
	1.302	14. 816156	740.8078				
	1. 436	11. 982547	599.12735		1		

GR binding to SREBP1 promoter region on GD20

GD20	input(ct)	GR(ct)		GR binding to SREBP1 promoter region
control	12.282	19.493	7.21139	0.67%
	12.452	20.021	7.56922	0.53%
	12.411	19.981	7.56964	0.53%
PCE(H)	13.673	20.551	6.87779	0.85%
	13.737	20.825	7.08834	0.73%
	13.834	20.732	6.89828	0.84%

## **Cell experiment results**

## Cytotoxicity of cholesterol by MTS assays

	control	24h	48h	72h		control	10μM cholesterol	20μM cholesterol	40μM cholesterol
OD	0.573	0.531	0.534	0.360	OD	0.567	0.555	0.616	0.527
	0.644	0.602	0.544	0.413		0.582	0.527	0.633	0.611
						0.510	0.525	0.635	0.629
	0.634	0.592	0.492	0.368		0.459	0.479	0.455	0.650
	0.625	0.583	0.542	0.393		0.457	0.476	0.500	0.539
	0.548	0.606	0.589	0.373		0.522	0.437	0.735	0.530
						0.427	0.462	0.448	0.504
	0.536	0.594	0.584	0.376		0.611	0.441	0.423	0.613
	0.589	0.581	0.522	0.412		0.571	0.468	0.437	0.508

## pyroptosis related genes and Steroid synthase mRNA induced by cholesterol

CT	GAPDH	NLRP3	caspase1	IL-1β	CT	gapdh	star	gapdh	P450scc
control	18.29923	33. 93936	25.4532	27.0312	control	17.55750237	21.74093437	17.13436508	21.71754456
	17.6231	32.99538	25.079	27.0702		17.08610916	21.3894043	17.49586678	21.76583099
	19. 51553	34.93497	27.2808	29.0965		19.21323586	23.98319817	19.32333183	23.89523697
	19. 53727	34. 34325	27.101	27.7207		18.9209137	23.92643738	19.33498001	23.93972206
	16.95096	32.24385	23.8466	25.841		16.50878716	21.25391006	16.53042221	21.18402481
	16.82304	32.16024	24.1286	25.9698		16.54007721	21.10219383	16.52265167	21.27386665
10µM cholesterol	19.92429	33. 47204	26.7637	28. 1832	10µM cholesterol	19.35540771	23.75626183	19.63576508	23.98295212
	19.56346	33.65534	26.8559	28.6435		19.01935005	23.69089317	19.04005432	23.88620377
	20.31212	33. 82973	27.8334	26.9367		20.09096146	24.58085251	19.99766541	24.75643158
	20.35257	33. 79848	27.3615	27.0628		20.17528152	24.66859055	20.10528374	24.81220055
	18.88534	34. 28744	25. 5998	27.1859		18.30836678	23.08791733	18.76272392	23.30116653
	18.73242	34. 77179	25.9824	26.9715		18.49011612	23.18108368	18.83977318	23.46994781
20µM cholesterol	19. 43949	34. 42577	26. 5573	28. 3031	20µM cholesterol	19.6554184	24.91193962	19.68561172	24.90226746
	19.62468	33.96172	26.4453	28. 5635		19.82545471	24.74606705	19.87798119	24.56402588
	20. 43732	35.02811	27.147	27.3297		19.54091835	24.93455315	19.45327759	24.52190208
	20. 33547	35. 19829	27.3956	27.7346		19.45770454	24.56183434	19.25424957	23.97173882
	18. 52931	33. 76357	25. 3191	27.8174		18.55336571	23.28997421	18.51654053	23.3660202
	18. 56579	32.83501	25. 5668	27.6184		18.63993263	23.23032646	18.27906418	23.41304398
40µM cholesterol	18. 31875	33. 56663	25. 5758	27.9737	40µM cholesterol	18.08802795	23.07123756	19.0236969	24.73491859
	18. 54763	34.08464	25. 5369	27.7234		18.16338348	23.15242386	19.28524399	24.61812782
	18.74778	34. 49428	25.7112	28.2856		18.44371796	23.2475071	18.77781677	23.5897377
	18.81338	34. 14453	25.9492	28.1294		18.52975845	23.47258835	18.53525543	23.08977699
	19.65723	33. 39845	26. 4773	27.3779		18.60061569	23.67888374	18.29201889	22.95222855
	19.94422	34.00071	26.3544	27.6035		18.50408325	23.2120285	18.10634804	23.01398468

CT Value	GAPDH	star		GAPDH	p450scc
Control	25.6843	20.9410954	Control	26.76677132	23.00773811
	25.7436	20.8671913		26.50980186	22.81729126
	25.9048	21.1250401		26.47048759	22.72478676
	25.6717	20.9773045		26.4282074	22.63291359
	25.5391	21.1249657		26.33546257	22.69720078
	25.8716	21.3746777		26.40421295	22.43786049
	25.9903	21.5262146		26.43598938	22.79540062
	26.0218	21.5638351		26.408144	22.58060837
40µM cholesterol	25.6198	21.5398006	40µM cholesterol	26.08885384	22.72357178
	25.9315	Undetermined		26.07881737	22.8042984
	25.498	21.3993549		25.68997192	22.6420784
	25.4859	21.473135		25.62738228	22.5819664
	25.4331	21.473259		25.61900711	22.5177002
	25.4237	21.5859299		25.76694489	22.44528198
	25.5854	21.9653816		25.91734123	22.96069527
	25.9311	Undetermined		25.76708794	22.61360931
NLRP3 siRNA	26.5684	21.3882236	NLRP3 siRNA	25.97465134	22.42935562
	26.1055	21.1454983		25.98221779	22.70117569
	26.067	21.07938		25.99841499	22.69368935
	26.0505	21.1701851		25.81901932	22.67439461
	26.1511	21.0818748		25.94172668	22.57903862
	26.2965	21.3483696		25.90717316	22.67859268
	26.2568	21.3880062		26.10468483	22.62475395
	26.5461	21.9376678		25.89145851	22.71029663
40µM cholesterol+nlrp3 siRNA	25.6822	21.3837929	40µM cholesterol+nlrp3 siRNA	26.00885582	22.34472656
	25.5792	21.4623985		25.99958801	22.37170601
	25.5619	Undetermined		26.06227493	22.33443451
	25.6192	Undetermined		25.85551834	22.29990578
	25.7564	21.5206871		25.86984062	22.38780785
	26.16	21.5037155		25.88537788	22.33727837
	25.886	21.8156719		25.97057152	22.4251709
	25 9334	21 7604961		26 0392704	22 96913719

mRNA expression of StAR and P450scc with transfection in the presence of NLRP3 siRNA

SR-B1 expression induced by caffeine and cortisol treatment

CT Value	GAPDH	SR-B1	CT Value	GAPDH	SR-B1
control	16.977	21.14401627	control	16.646	20.003
	17.128	21.17236328		16.497	20.296
	16.591	20.75191498		16.705	20.864
	16.506	20.55372238		16.601	20.487
	17.446	22.32834053		16.929	20.536
	17.356	22.74185753		17.139	20.571
0.1µM caffeine	16.027	20.86574059	300nM Cortisol	16.730	20.371
	16.266	21.02427101		16.824	20.369
	16.164	20.78315239		17.850	21.014
	16.648	20.65874825		17.956	21.031
	16.522	20.49269867		17.224	21.263
	15.872	20.51299858		17.200	21.211
1µM caffeine	16.121	21.16020393	600nM Cortisol	17.050	20.124
	16.990	21.32872543		17.242	20.129
	15.809	20.55095406		16.902	20.039
	15.976	20.31742477		16.978	20.257
	16.226	20.49884224		16.733	20.270
	16.151	20.46448708		16.512	20.208
10µM caffeine	16.658	20.88448334	1200nM Cortise	16.965	19.771
	16.663	20.65411758		17.005	19.937
	16.561	20.69150162		16.797	19.484
	16.617	20.64207077		17.549	19.649
	16.795	20.94201851		16.809	19.801
	16.752	20.70279694		16.966	19.441
100µM caffeine	16.421	20.46305656			
	16.411	20.32682419			
	16.551	20.66360092			
	16.509	20.38764954			
	17.232	21.69860039			
	17.151	21.24321938			

The content of cell TCH with transfection in the presence of SR-B1 siRNA

	OD value	TCH (umol/L)	Intracellular protein(mg/ml)	TCH(nmol/mg)
C+C	0.074	93	6.602465331	14.08564761
	0.077	103	6.371340524	16.16614268
	0.079	109.6666667	6.859270673	15.98809435
	0.086	133	7.347200822	18.10213212
	0.077	103	6.78222907	15.18674744
	0.079	109.6666667	7.193117617	15.24605498
c+cho	0.088	139.6666667	6.422701592	21.74578169
	0.09	146.3333333	6.551104263	22.3372011
	0.088	139.6666667	6.807909605	20.5153527
	0.093	156.3333333	6.910631741	22.6221479
	0.093	156.3333333	7.116076014	21.96903645
	0.094	159.6666667	7.475603493	21.35836482
cortisol+cho	0.097	169.6666667	7.552645095	22.46453587
	0.1	179.6666667	7.424242424	24.2
	0.098	173	7.270159219	23.79590251
	0.1	179.6666667	7.39856189	24.28399861
	0.097	169.6666667	7.989214176	21.23696561
	0.103	189.6666667	7.552645095	25.11261476
c+SR-B1 siRNA+cho	0.084	126.3333333	6.499743195	19.43666535
	0.085	129.6666667	6.679506934	19.41261053
	0.083	123	6.78222907	18.13563044
	0.088	139.6666667	6.961992809	20.06130579
	0.084	126.3333333	7.039034412	17.9475374
	0.087	136.3333333	7.270159219	18.75245496
cortisol+SR-B1 siRNA+cho	0.088	139.6666667	7.270159219	19.21095019
	0.089	143	7.39856189	19.32808053
	0.088	139.6666667	6.833590139	20.43825629
	0.091	149.6666667	7.270159219	20.58643589
	0.091	149.6666667	7.193117617	20.8069261
	0.096	166.3333333	7.526964561	22.09832822

#### The content of cell TCH with cortisol treatment

	OD value	TCH (umo1/L)	Intracellular protein (mg/ml)	TCH(nmol/mg)
control	0.082	0.783333333	0.179578	4.362078503
	0.082	0. 783333333	0.210466	3.721899658
	0.083	0.809444444	0.20809	3.889876709
	0.083	0.809444444	0.227098	3.564295786
	0.08	0.731111111	0.239572	3.051738563
	0.081	0.757222222	0.234226	3. 232870058
300nM cortisol	0.086	0.887777778	0.20215	4.391678347
	0.091	1.018333333	0.232444	4. 38098352
	0.095	1. 122777778	0.235414	4.769375559
	0.099	1. 227222222	0.229474	5.347979389
	0.1	1.253333333	0.241354	5. 192925468
	0.101	1.279444444	0.238978	5.353816855
600nM cortisol	0.095	1. 122777778	0.219376	5.11805201
	0.089	0.966111111	0.235414	4. 103881295
	0.085	0.861666667	0.235414	3.660218452
	0.109	1.488333333	0. 227692	6. 536607932
	0.117	1.697222222	0.235414	7.209521193
	0.086	0.887777778	0.230662	3.848825458
1200nM cortiso	0.093	1.070555556	0.213436	5.015815306
	0.097	1.175	0.209872	5. 598650606
	0.101	1.279444444	0.193834	6.600722497
	0.104	1.357777778	0.215812	6.291484152
	0.108	1.462222222	0.22294	6. 558815027
	0.11	1. 51444444	0.234226	6.465740116

SREBP1/P300 expression with cortisol treatment

CT Value	GAPDH	SREBP1	P300
control	17.926764	25.20528603	27.9014931
	17.633989	25.29555893	27.657753
	17.876997	26.06103516	29.3720589
	17.916428	26.83418083	29.2428703
	18.479593	25.59207535	28.1115093
	18.375229	25.65142059	28.4016037
300nM cortisol	17.992754	24.85059738	27.9359665
	18.060947	25.05620575	27.8941212
	18.173199	26.24107246	28.8421993
	18.146976	26.14394569	29.0008049
	18.885025	26.60834312	29.6214199
	18.822741	26.60164642	30.0110798
600nM cortisol	18.425627	25.79636002	27.9740105
	18.231054	25.63809776	28.0548123
	17.745457	24.96372414	27.8661461
	17.81179	24.97377968	28.2084675
	17.945351	25.03938484	27.4999523
	18.01684	25.20728874	28.0196533
1200nM cortisol	18.200954	25.27520561	27.7736168
	18.26166	25.27389145	27.9605865
	18.226862	25.24097061	27.241951
	18.144314	25.23304176	27.4194775
	17.896912	24.76562119	27.4729691
	17.991144	24.73654556	27.8344917

Enrichment of H3K14ac in the promoter region of SR-B1

	input(ct)	H3K9(ct)		H3K9 level
control	22.74558067	29.42102623	6.675445557	0.9783%
	22.85624886	29.52350235	6.667253494	0.9839%
	22.78751564	29.6157608	6.828245163	0.8800%
1200nM cortis ol	21.97542381	28.74267197	6.767248154	0.9180%
	22.13698196	28.31145096	6.174468994	1.3845%
	22.20594406	28.76506042	6.559116364	1.0605%
	input(ct)	H3K14(ct)		H3K14 level
control	22.74558067	28.60329628	5.857715607	1.7245%
	22.85624886	28.77150345	5.915254593	1.6570%
	22.78751564	28.66283417	5.875318527	1.7035%
1200nM cortis ol	21.97542381	27.30326195	5.327838135	2.4898%
	22.13698196	27.62234306	5.485361099	2.2322%
	22.20594406	27.35076141	5.144817352	2.8265%
	input(ct)	H3K27(ct)		H3K27 level
control	22.74558067	29.91156769	7.165987015	0.6963%
	22.85624886	30.61416245	7.757913589	0.4620%
	22.78751564	31.93647385	9.148958206	0.1762%
1200nM cortis ol	21.97542381	29.63829803	7.662874222	0.4935%
	22.13698196	29.81866455	7.681682587	0.4871%
	22.20594406	30.14811897	7.942174911	0.4066%
	input(ct)	IgG(ct)		IgG level
control	22.74558067	37.23569679	14.49011612	0.0043%
	22.85624886	37.3182888	14.46203995	0.0044%
	22.78751564	37.17285728	14.38534164	0.0047%
1200nM cortis ol	21.97542381	38.40838051	16.4329567	0.0011%
	22.13698196	38.14694786	16.0099659	0.0015%
	22.20594406	37,70048332	15,49453926	0.0022%

### GR binding to SREBP1 promoter region

	input(ct)	GR(ct)		GR level	mean	p value
control	22.89284706	29.65511894	6.762271881	0.9212%	1.10%	
	22.94981766	28.99909019	6.049272537	1.5100%		
	22.81563377	29.33442497	6.518791199	1.0906%		
	22.93913269	29.77220917	6.833076477	0.8771%		
1200nM cortis ol	23.95516205	29.9902153	6.035053253	1.5250%	1.65%	0.01311469
	24.00595093	29.96511078	5.959159851	1.6074%		
	24.01413536	29.94905472	5.934919357	1.6346%		
	24.08696556	29.86917686	5.782211304	1.8171%		

SREBP1, p300 and SR-B1 mRNA and the enrichment of H3K14ac of SR-B1 in the presence of GR siRNA

ct value	GAPDH	SREBP1	SRBI		GAPDH	P300		input(ct)	h3k14(ct)		SRB1 H3K14
GRNC+Control	17.909	24.352	19.775	GRNC-Control	17.909	25.411	GRNC+Control	23.96575546	31.06475546	7.099	0.739
	17.780	24.409	19.891		17.780	25.573		23.10193253	30.81893253	7.717	0.489
	18.311	24.839	20.425		18.311	25.786		23.1867485	30.5387485	7.352	0.61%
	18.126	24.916	20.523		18.126	25.852	GRNC+cortis of	23.51726151	29.64826151	6.131	1.43%
	18.847	27.194	22.358		18.847	27.641		23.95776176	30.86376176	6.906	0.83%
	18.335	26.174	22.159		18.335	27.367		23.53605843	29.89505843	6.359	1.22%
GRNC+cortisol	18.343	24.439	20.548	GRNC-CORT	18.343	25.862	GRsiRNA+Control	23.69153404	30.71053404	7.019	0.77%
	18.665	24.839	20.464		18.665	26.025		23.79726791	31.49926791	7.702	0.48%
	18.691	24.329	19.854		18.691	25.299		23.96203613	31.37303613	7.411	0.59%
	18.225	24.110	19.908		18.225	25.369	GRsiRNA+cortisol	22.66661644	30.65561644	7.989	0.39%
	18.509	23.993	20.507		18.509	25.674		22.94659615	31.41359615	8.467	0.28%
	18.050	23.655	20.150		18.050	25.805		22.60107231	29.63307231	7.032	0.76%
GRsiRNA+Control	18.671	25.592	21.572	GRsiRNA-C	18.671	27.027					
	18.961	25.958	21.614		18.961	26.460					
	18.026	25.446	21.809		18.026	26.659					
	18.983	25.482	21.748		18.983	26.553					
	18.723	26.094	21.317		18.723	27.183					
	18.615	26.414	21.597		18.615	27.196					
GRsiRNA+cortisol	18.739	27.163	22.042	GRsiRNA-CORT	18.739	25.977					
	18.341	27.250	21.990		18.341	25.661					
	19.102	28.443	22.916		19.102	28.381					
	19.407	28.402	22.967		19.407	28.030					
	18.245	25.691	20.535		18.245	27.058					
	18.107	25.398	20.517		18.107	26.946					

ct value	GAPDH	SRB1	p300		input(ct)	H3K14(ct)		SRB1 H3K14
SREBP1NC+Control	19.078	20.976	26.266	SREBP1NC+Control	25.15363503	31.27689171	6.123256683	1.43%
	19.003	20.955	26.240		25.1744957	31.37460899	6.200113297	1.36%
	18.168	20.408	25.464		25.01725197	31.32406235	6.306810379	1.26%
	18.112	20.475	25.501	SREBP1NC+cortisol	24.98763466	30.23046684	5.242832184	2.64%
	17.601	19.523	24.611		24.91749573	30.63483429	5.717338562	1.90%
	17.441	19.447	24.405		25.3627491	30.18658257	4.823833466	3.53%
SREBP1NC+cortis ol	18.946	20.092	25.549	SREBP1siRNA+Control	24.78211212	31.17200737	6.389895248	1.19%
	18.702	20.425	25.548		25.28468704	31.23997192	5.955284882	1.61%
	19.550	21.404	26.521		25.41594505	31.28144989	5.865504837	1.72%
	19.452	21.095	26.545	SREBP1siRNA+cortisol	24.86794853	30.98734467	6.119396133	1.44%
	19.482	21.476	26.241		24.97038269	31.36640755	6.396024857	1.19%
	19.853	21.406	25.939		24.71640587	30.99751053	6.28110466	1.29%
SREBP1siRNA+Control	18.997	20.888	26.937					
	18.274	20.722	26.983					
	17.752	20.178	25.195					
	17.597	20.201	25.194					
	18.324	21.405	25.881					
	18.398	21.289	25.959					
SREBP1siRNA+cortisol	17.882	20.268	25.448					
	17.958	20.303	25.555					
	18.429	20.801	26.009					
	18.550	20.765	27.105					
	18.578	20.456	25.724					
	18.180	19.898	25.669					

## p300, SR-B1 mRNA and the enrichment of H3K14ac of SR-B1 in the presence of SREBP1 siRNA

SR-B1 mRNA and the enrichment of H3K14ac of SR-B1 in the presence of p300 siRNA

ct value	gapdh	SRB1		input(ct)	H3K14(ct)		SRB1 H3K14		p value
p300NC+Control	19.932	21.060	p300NC+Control	23.35155296	28.94034195	5.588788986	2.08%	1.63%	
	19.273	21.103		23.27741432	29.56392288	6.28650856	1.28%		
	18.337	19.388		23.23568726	29.26932732	6.03364006	1.53%		
	18.026	19.496	p300NC+cortisol	23.88287735	29.03180428	5.148926926	2.82%	2.93%	0.008043338
	18.016	19.187		23.58593941	28.74478783	5.158848419	2.80%		
	17.983	19.193		23.53712654	28.51203178	4.974905243	3.18%		
p300NC+cortis ol	19.006	19.674	p300 siRNA+NC	23.71212196	29.19798279	5.485860825	2.23%	2.00%	
	19.002	19.870		23.64438629	29.29250259	5.648116302	1.99%		
	18.202	18.946		23.73147964	29.53799629	5.806516647	1.79%		
	18.100	18.807	p300 siRNA+cortiso	22.52417946	28.65958565	6.135406189	1.42%	1.96%	0.033227671
	18.953	20.194		22.39254189	27.97757034	5.585028458	2.08%		
	18.943	20.048		22.54251862	27.94387479	5.401356171	2.37%		
p300 siRNA+control	18.287	19.293							
	18.161	19.243							
	17.615	18.878							
	17.751	19.180							
	19.082	20.540							
	18.849	20.160							
p300 siRNA+cortisol	18.724	20.918							
	18.653	21.062							
	17.583	19.300							
	17.563	19.938							
	19.553	20.831							
	19.576	21.059							