

Supplementary Figure S1

ARPE-19

Term	Overlap	P-value	Adjusted P-value	Old P-value	Old Adjusted P-value	Z-score	Combined Score
PI3K-Akt signaling pathway_Homo sapiens_hsa04151	3/341	0.007624982	0.078100644	0.010819483	0.106106862	-2.015185734	9.826701297
ECM-receptor interaction_Homo sapiens_hsa04512	2/82	0.004322495	0.078100644	0.005982353	0.106106862	-1.712523855	9.322847051
Axon guidance_Homo sapiens_hsa04360	2/127	0.010077502	0.078100644	0.013691208	0.106106862	-1.699541648	7.81355745
Focal adhesion_Homo sapiens_hsa04510	2/202	0.024212934	0.12510016	0.032431827	0.167564438	-1.796280058	6.683721562
Butirosin and neomycin biosynthesis_Homo sapiens_hsa00524	1/5	0.005986214	0.078100644	0.008519652	0.106106862	-1.093259598	5.595626269
Aldosterone-regulated sodium reabsorption_Homo sapiens_hsa04960	1/39	0.045791114	0.141816974	0.055575735	0.170971042	-1.460082232	4.502404812
Glycosaminoglycan biosynthesis - keratan sulfate_Homo sapiens_hsa00533	1/15	0.017855781	0.110705845	0.022574	0.139958798	-1.109394537	4.465787761
Galactose metabolism_Homo sapiens_hsa00052	1/30	0.035405791	0.141816974	0.043319495	0.170971042	-1.319472288	4.408198443

A549

Term	Overlap	P-value	Adjusted P-value	Old P-value	Old Adjusted P-value	Z-score	Combined Score
Leishmaniasis_Homo sapiens_hsa05140	3/73	0.001890254	0.190915615	0.004372114	0.441583495	-1.876990118	11.77068813
Serotonergic synapse_Homo sapiens_hsa04726	3/112	0.006313798	0.254618378	0.013680487	0.465500253	-1.85642008	9.402800943
Aldosterone-regulated sodium reabsorption_Homo sapiens_hsa04960	2/39	0.007562922	0.254618378	0.01382674	0.465500253	-1.775340334	8.67164567
Mineral absorption_Homo sapiens_hsa04978	2/51	0.012682087	0.320222707	0.022489415	0.516567006	-1.672411785	7.304366714
Herpes simplex infection_Homo sapiens_hsa05168	3/185	0.024212124	0.364434728	0.048712627	0.516567006	-1.658162838	6.169861054
PPAR signaling pathway_Homo sapiens_hsa03320	2/69	0.022453493	0.364434728	0.038625342	0.516567006	-1.593101129	6.047904297
Arrhythmogenic right ventricular cardiomyopathy (ARVC)_Homo sapiens_hsa05412	2/74	0.025576904	0.364434728	0.043704333	0.516567006	-1.613170591	5.913989069
Complement and coagulation cascades_Homo sapiens_hsa04610	2/79	0.028866117	0.364434728	0.049019197	0.516567006	-1.595877856	5.657525511
NF-kappa B signaling pathway_Homo sapiens_hsa04064	2/93	0.03890573	0.401474639	0.065055076	0.516567006	-1.539728881	4.998904952

Figure S1. The source data of pathway analysis

Supplementary Figure S2

ARPE-19

Dex-treatment	Normalized by actin	Normalized by CTR (0hr, AVG)	AVG
0hr.	0.0267	1.1702	1.00
	0.0241	1.0585	
	0.0176	0.7713	
16hr.	0.8009	0.9326	38.63
	0.8654	1.0078	
	0.9099	1.0596	
24hr.	0.5067	0.8752	26.00
	0.5856	1.0115	
	0.6446	1.1133	

A549

Dex-treatment	Normalized by actin	Normalized by CTR (0hr, AVG)	AVG
0hr.	0.9197	1.0793	1.00
	0.8588	1.0078	
	0.7779	0.9129	
16hr.	1.7214	1.0277	1.97
	1.6817	1.0040	
	1.6220	0.9683	
24hr.	1.4628	0.9213	1.87
	1.5944	1.0042	
	1.7060	1.0745	

Figure S2. The source data of Figure 3A, showing the increased expression of ENAC α by Dex treatment in ARPE-19 and A549 cells.