

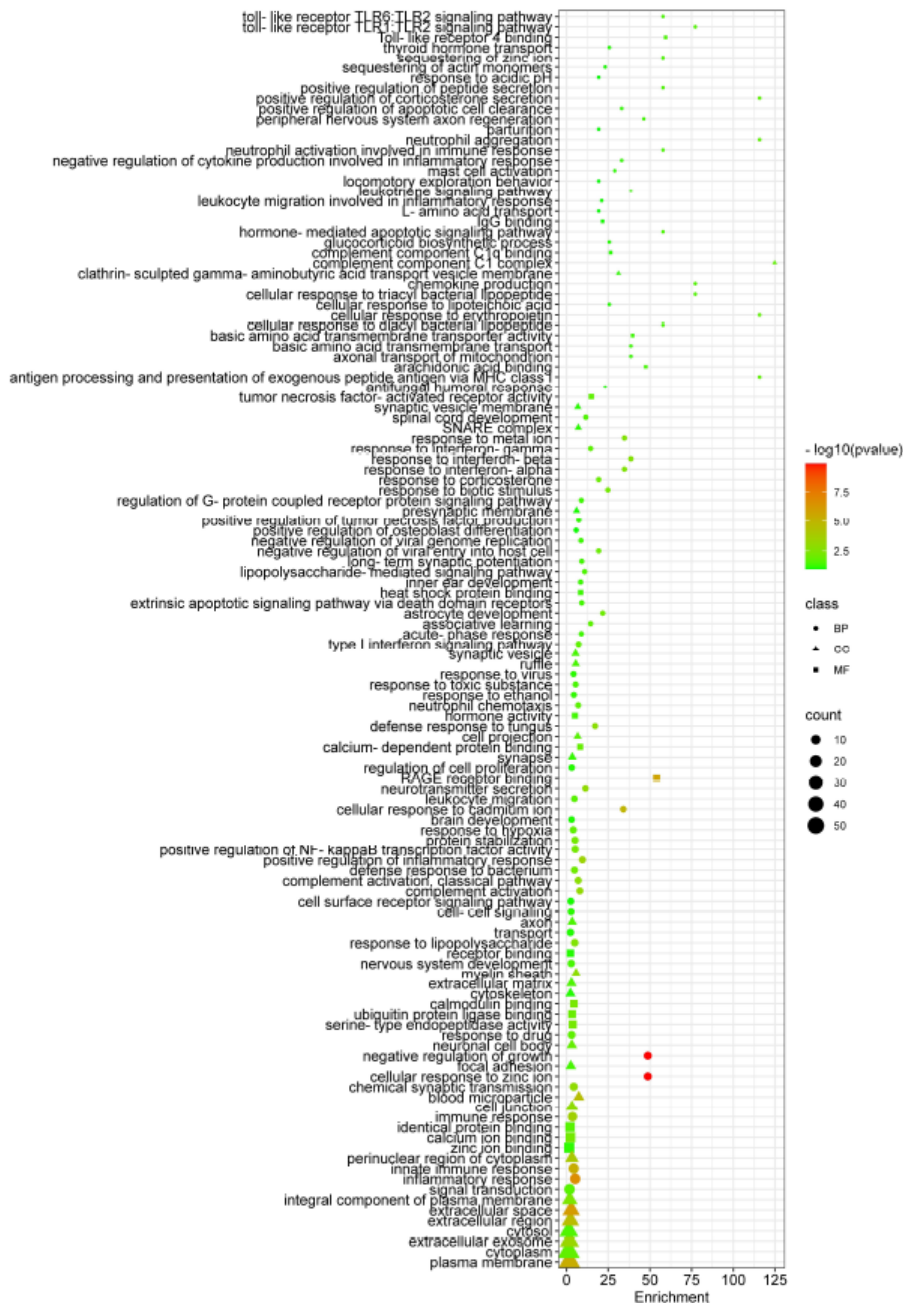
## Supplementary Materials

# Human microRNA-4433 (hsa-miR-4443) Targets 18 Genes to be a Risk Factor of Neurodegenerative Diseases

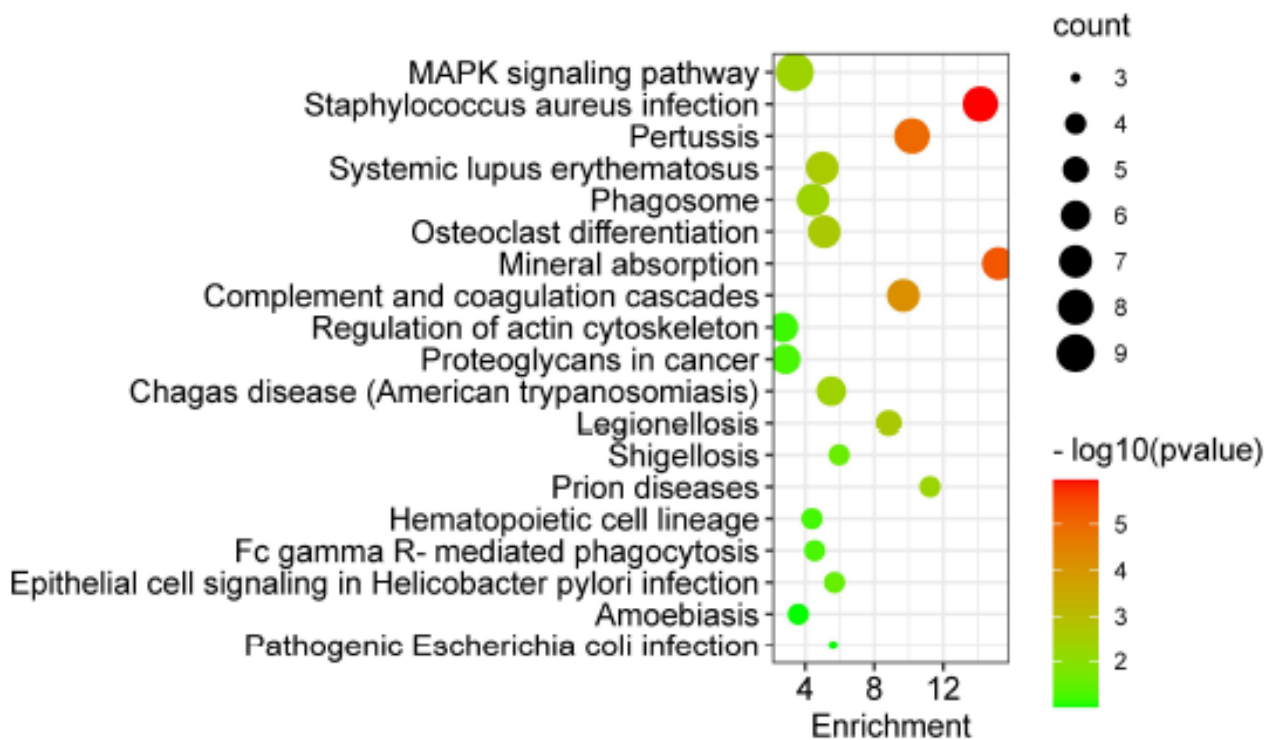
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**Fig. (S1).** GO analyses of the co-differentially expressed genes (co-DEGs) in neurodegenerative disease. **Abbreviations:** BP: biological process, CC: cell component, MF: molecular function.



**Fig. (S2).** Enrichment analysis of KEGG pathway of the co-differentially expressed genes (co-DEGs) in neurodegenerative disease.

Table S1. Gene list of Figure 2A.

name	ADlogFC	ADPvalue	HDlogFC	HDPvalue	UP/Down	Function
CBLN4	-0.625963951	2.06E-66	-0.398165312	4.31E-24	Down	Synapse related
DMXL2	-0.33267104	3.41E-47	-0.321724907	8.05E-38	Down	Synapse related
FGF12	-0.427138746	5.35E-50	-0.307698531	9.13E-27	Down	Synapse related
GAD1	-0.563853177	2.79E-57	-0.30800006	2.73E-21	Down	Synapse related
GRIK2	-0.414548447	2.20E-48	-0.407192074	3.16E-39	Down	Synapse related
SNAP25	-0.393288652	7.79E-55	-0.378732731	2.11E-46	Down	Synapse related
SST	-0.630398954	1.97E-65	-0.353483963	3.17E-17	Down	Synapse related
SYN2	-0.521280668	5.95E-48	-0.379205185	1.34E-23	Down	Synapse related
SYT1	-0.749051004	5.46E-48	-0.557651085	1.07E-27	Down	Synapse related
TAC1	-0.485167022	3.05E-62	-0.338131206	5.48E-24	Down	Synapse related
C1QA	0.466032557	2.23E-57	0.455830562	1.88E-39	UP	Immune related
C1QB	0.35387493	9.53E-52	0.385244645	5.38E-41	UP	Immune related
C1QC	0.38314179	2.13E-50	0.463037052	4.67E-46	UP	Immune related
C1R	0.397378708	6.85E-56	0.328026763	1.69E-34	UP	Immune related
C4A	0.582410479	4.15E-77	0.403966012	5.09E-35	UP	Immune related
C4B	0.583604003	4.17E-76	0.407914335	1.42E-34	UP	Immune related
CD14	0.33754705	8.46E-40	0.303501401	2.77E-26	UP	Immune related
CXCL1	0.516416706	3.75E-44	0.426904892	5.94E-23	UP	Immune related
FCER1G	0.361198496	2.11E-53	0.335276036	2.40E-35	UP	Immune related
HAMP	0.356341168	1.63E-22	0.312580322	9.39E-15	UP	Immune related
IFITM2	0.445508384	3.87E-52	0.369936771	2.08E-30	UP	Immune related
IFITM3	0.437286528	3.75E-54	0.355621889	5.30E-30	UP	Immune related
RGS1	0.595260588	1.21E-37	0.358996521	3.17E-12	UP	Immune related
S100A12	0.506664511	5.01E-31	0.479028423	1.16E-28	UP	Immune related
S100A8	0.728612285	4.31E-41	0.707960944	1.58E-34	UP	Immune related
S100A9	0.652855886	5.94E-42	0.652340911	7.16E-36	UP	Immune related
TLR2	0.483233819	3.31E-66	0.38351121	4.68E-35	UP	Immune related
TNFRSF10D	0.53029634	1.93E-66	0.439402646	1.16E-41	UP	Immune related
TNFRSF11B	0.582188454	1.84E-63	0.389521073	2.23E-26	UP	Immune related
TNFRSF1A	0.356308614	2.08E-65	0.305092563	8.89E-39	UP	Immune related
TYROBP	0.331007725	1.93E-47	0.345124239	3.14E-36	UP	Immune related

**Table S2 Gene list of Figure 3B-C**

<b>name</b>	<b>ADlogFC</b>	<b>ADPvalue</b>	<b>HDlogFC</b>	<b>HDPvalue</b>	<b>UP/Down</b>	<b>Module</b>	<b>Function</b>
C1QA	0.466032557	2.23E-57	0.455830562	1.88E-39	UP	Blue	Immune related
C1QB	0.35387493	9.53E-52	0.385244645	5.38E-41	UP	Blue	Immune related
C1QC	0.38314179	2.13E-50	0.463037052	4.67E-46	UP	Blue	Immune related
C1R	0.397378708	6.85E-56	0.328026763	1.69E-34	UP	Blue	Immune related
C4A	0.582410479	4.15E-77	0.403966012	5.09E-35	UP	Blue	Immune related
C4B	0.583604003	4.17E-76	0.407914335	1.42E-34	UP	Blue	Immune related
CD14	0.33754705	8.46E-40	0.303501401	2.77E-26	UP	Blue	Immune related
CD163	0.452493951	2.30E-53	0.328062683	3.26E-33	UP	Blue	Immune related
CD44	0.50652419	2.20E-47	0.338090417	6.28E-21	UP	Blue	Immune related
CES1	0.421973487	2.75E-35	0.317978043	1.85E-21	UP	Blue	Immune related
CHI3L1	0.414236528	2.66E-33	0.307743888	1.08E-16	UP	Blue	Immune related
CRABP1	0.40954929	2.72E-21	0.373674603	1.26E-18	UP	Blue	Immune related
CXCL1	0.516416706	3.75E-44	0.426904892	5.94E-23	UP	Blue	Immune related
FCER1G	0.361198496	2.11E-53	0.335276036	2.40E-35	UP	Blue	Immune related
HAMP	0.356341168	1.63E-22	0.312580322	9.39E-15	UP	Blue	Immune related
IFI30	0.416485785	1.10E-48	0.322553428	5.44E-24	UP	Blue	Immune related
IFITM1	0.424344285	5.59E-61	0.388029431	2.86E-40	UP	Blue	Immune related
IFITM2	0.445508384	3.87E-52	0.369936771	2.08E-30	UP	Blue	Immune related
IL1R2	0.374121064	1.51E-35	0.316558841	3.36E-27	UP	Blue	Immune related
S100A12	0.506664511	5.01E-31	0.479028423	1.16E-28	UP	Blue	Immune related
S100A8	0.728612285	4.31E-41	0.707960944	1.58E-34	UP	Blue	Immune related
S100A9	0.652855886	5.94E-42	0.652340911	7.16E-36	UP	Blue	Immune related

name	ADlogFC	ADPvalue	HDlogFC	HDPvalue	UP/Down	Module	Function
TLR2	0.483233819	3.31E-66	0.38351121	4.68E-35	UP	Blue	Immune related
TNFRSF11B	0.582188454	1.84E-63	0.389521073	2.23E-26	UP	Blue	Immune related
TNFRSF1A	0.356308614	2.08E-65	0.305092563	8.89E-39	UP	Blue	Immune related
TYROBP	0.331007725	1.93E-47	0.345124239	3.14E-36	UP	Blue	Immune related
CRH	-0.978322323	4.29E-89	-0.511880721	6.99E-21	Down	Turquoise	Synapse related
SYT1	-0.749051004	5.46E-48	-0.557651085	1.07E-27	Down	Turquoise	Synapse related
SST	-0.630398954	1.97E-65	-0.353483963	3.17E-17	Down	Turquoise	Synapse related
GAD1	-0.563853177	2.79E-57	-0.30800006	2.73E-21	Down	Turquoise	Synapse related
SLC4A10	-0.529607639	2.20E-40	-0.395948635	7.19E-22	Down	Turquoise	Synapse related
SYN2	-0.521280668	5.95E-48	-0.379205185	1.34E-23	Down	Turquoise	Synapse related
TAC1	-0.485167022	3.05E-62	-0.338131206	5.48E-24	Down	Turquoise	Synapse related
GABRG2	-0.466060557	1.59E-44	-0.315081183	3.66E-24	Down	Turquoise	Synapse related
UCHL1	-0.432132863	3.43E-49	-0.325742535	1.29E-28	Down	Turquoise	Synapse related
FGF12	-0.427138746	5.35E-50	-0.307698531	9.13E-27	Down	Turquoise	Synapse related
NRXN3	-0.422938279	1.61E-63	-0.317405407	1.25E-38	Down	Turquoise	Synapse related
GRIK2	-0.414548447	2.20E-48	-0.407192074	3.16E-39	Down	Turquoise	Synapse related
CDC42	-0.394709765	2.43E-55	-0.304041204	5.57E-35	Down	Turquoise	Synapse related
SNAP25	-0.393288652	7.79E-55	-0.378732731	2.11E-46	Down	Turquoise	Synapse related
ATP6V1A	-0.341298824	1.90E-30	-0.406277765	1.48E-34	Down	Turquoise	Synapse related
DMXL2	-0.33267104	3.41E-47	-0.321724907	8.05E-38	Down	Turquoise	Synapse related
GNG2	-0.304259583	1.98E-43	-0.32349899	6.62E-35	Down	Turquoise	Synapse related
APOD	0.341773751	2.37E-26	0.372888981	2.10E-31	UP	Turquoise	Synapse related