

Table S3. The pathway list of differential proteins in various fractions in MCF-7 cells under estradiol stimulation

Pathways	Gene list	Enrichment p-value	Depletion p-value	Fraction
Pyruvate metabolism and TCA cycle (ReactomeREACT_1046)	DLD IDH3A LDHB MDH2 PDHA1	1.42E-04	1.00E+00	A
Citrate cycle (TCA cycle) (KEGG 00020)	DLD IDH3A MDH2 PDHA1	6.36E-04	9.99E-01	A
Glycolysis / Gluconeogenesis (KEGG 00010)	DLD HK1 LDHB PDHA1 PGAM1	8.73E-04	9.99E-01	A
Pyruvate metabolism (KEGG 00620)	DLD LDHB MDH2 PDHA1	1.50E-03	9.99E-01	A
Metabolism of carbohydrates (ReactomeREACT_474)	DLD G6PD HK1 LDHB MDH2 PDHA1 PGAM1	1.91E-03	9.98E-01	A
Valine, leucine and isoleucine biosynthesis (KEGG00290)	IARS PDHA1 ATP5A1 ATP5C1 COX7A2 COX7C	8.02E-03	9.92E-01	A
Parkinson's disease (KEGG 05012)	NDUFA5 NDUFB9 UQCRCB UQCRC2VDAC2 VDAC3	3.23E-05	1.00E+00	B
Huntington's disease (KEGG 05016)	ATP5A1 ATP5C1 COX7A2 COX7C NDUFA5 NDUFB9 UQCRCB UQCRC2VDAC2 VDAC3	5.07E-04	1.00E+00	B
Oxidative phosphorylation (KEGG 00190)	ATP5A1 ATP5C1 COX7A2 COX7C NDUFA5 NDUFB9 UQCRCB UQCRC2	1.06E-03	9.99E-01	B

Alzheimer's disease (KEGG 05010)	ATP5A1 ATP5C1 COX7A2 COX7C NDUFA5 NDUFB9 UQCRB UQCRC2	4.36E-03	9.96E-01	B
Aminoacyl-tRNA biosynthesis (KEGG 00970)	IARS QARS RARS	2.52E-02	9.75E-01	B
Cardiac muscle contraction (KEGG 04260)	COX7A2 COX7C UQCRB UQCRC2	3.50E-02	9.65E-01	B
Parkinson's disease (KEGG 05012)	ATP5A1 ATP5B ATP5D COX5B VDAC2	0.004967	0.995	C
Huntington's disease (KEGG 05016)	ATP5A1 ATP5B ATP5D COX5B VDAC2	0.01914	0.9809	C
Oxidative phosphorylation (KEGG 00190)	ATP5A1 ATP5B ATP5D COX5B	0.0266	0.9734	C
Base excision repair (KEGG 03410)	PARP1 PCNA	0.03507	0.9649	C
Alzheimer's disease (KEGG 05010)	ATP5A1 ATP5B ATP5D COX5B	0.05368	0.9463	C
Metabolism of nucleotides (Reactome REACT_1698)	ATP5A1 ATP5B ATP5D	0.08171	0.9183	C
Pathogenic Escherichia coli infection (KEGG 05130)	ACTG1 KRT18	0.08888	0.9111	C