

**Supplemental tables**

**Table S1. Top ten upregulated and downregulated DEPs in ALDH<sup>high</sup> cells**

<b>Top Ten Downregulated Proteins in ALDH<sup>high</sup> cells</b>				
Abbreviation	Full Name	Subcellular location	Fold change	p value
VTN	vitronectin	Extracellular Space	-6.995	0.008
HBB	hemoglobin subunit beta	Cytoplasm	-6.130	0.004
HBA2	hemoglobin subunit alpha 2	Extracellular Space	-4.104	0.014
SUGP1	SURP and G-patch domain containing 1	Nucleus	-1.650	0.017
PARL	presenilin associated rhomboid like	Cytoplasm	-1.445	0.006
GHITM	growth hormone inducible transmembrane protein	Cytoplasm	-1.426	0.041
MOCS3	molybdenum cofactor synthesis 3	Cytoplasm	-1.412	0.011
VKORC1	vitamin K epoxide reductase complex subunit 1	Cytoplasm	-1.402	0.043
ERCC2	ERCC excision repair 2, TFIIH core complex helicase subunit	Nucleus	-1.388	0.001
XPC	XPC complex subunit, DNA damage recognition and repair factor	Nucleus	-1.373	0.019
<b>Top Ten Upregulated Proteins in ALDH<sup>high</sup> cells</b>				
Abbreviation	Full Name	Location	Fold change	p value
TIMM9	translocase of inner mitochondrial membrane 9	Cytoplasm	2.158	0.019
PEX19	peroxisomal biogenesis factor 19	Cytoplasm	1.707	0.012
SF3B5	splicing factor 3b subunit 5	Nucleus	1.430	0.012
WDCP	WD repeat and coiled coil containing	Other	1.418	0.001
DPY30	dpy-30 histone methyltransferase complex regulatory subunit	Nucleus	1.391	0.025
MPG	N-methylpurine DNA glycosylase	Nucleus	1.340	0.012
COX5A	cytochrome c oxidase subunit 5A	Cytoplasm	1.283	0.006
CCDC50	coiled-coil domain containing 50	Cytoplasm	1.264	0.033
JPT1	Jupiter microtubule associated homolog 1	Nucleus	1.263	0.011
ARPC5	actin related protein 2/3 complex subunit 5	Cytoplasm	1.234	0.008

Differentially expressed proteins (DEPs) in ALDH<sup>high</sup> cells (relative to ALDH<sup>low</sup> cells) were identified using a two-tailed Student's unpaired t-test, with a cutoff p value < 0.05. The differential abundance of proteins was expressed by the fold change, which was calculated based on the ratio of the protein abundance in ALDH<sup>high</sup> cells versus that in ALDH<sup>low</sup> cells. Fold changes of up-regulated proteins are positive numbers, whereas the fold changes of down-regulated proteins are negative numbers. Top ten upregulated and downregulated proteins were ranked based on fold change value.

**Table S2. Abbreviation list**

<b>Abbreviations</b>	<b>Full Name</b>
AGPAT5	1-acylglycerol-3-phosphate O-acyltransferase 5
ALDH	Aldehyde dehydrogenase
ARG2	arginase 2
ATP5F1C	ATP synthase F1 subunit gamma
ATP5MG	ATP synthase membrane subunit g
CDIPT	CDP-diacylglycerol--inositol 3-phosphatidyltransferase
COX15	cytochrome c oxidase assembly homolog COX15
COX5A	cytochrome c oxidase subunit 5A
CRC	colorectal cancer cells
CSC	colon stem cell
CYB5B	cytochrome b5 type B
DBI	diazepam binding inhibitor, acyl-CoA binding protein
DEPs	Differentially expressed proteins
DHODH	dihydroorotate dehydrogenase (quinone)
DOCK9	dedicator of cytokinesis 9
ERCC2	ERCC excision repair 2, TFIIH core complex helicase subunit
ETC	mitochondrial electron transport chain
FDR	false discovery rate
GO	Gne Ontology
HBA2	hemoglobin subunit alpha 2
HBB	hemoglobin subunit beta
HEBP2	heme binding protein 2
IPA	Ingenuity pathway analysis
KRT1	keratin 1
KRT10	keratin 10
KRT2	keratin 2
KRT9	keratin 9
LIG3	DNA ligase 3
NCSTN	nicastrin
NDUFB1	NADH:ubiquinone oxidoreductase subunit B1
NDUFB5	NADH:ubiquinone oxidoreductase subunit B5
NDUFB6	NADH:ubiquinone oxidoreductase subunit B6
NDUFS3	NADH:ubiquinone oxidoreductase core subunit S3
NDUFS8	NADH:ubiquinone oxidoreductase core subunit S8
NER	nucleotide excision repair
PAM16	presequence translocase associated motor 16

PARL	presenilin associated rhomboid like
PEX11B	peroxisomal biogenesis factor 11 beta
PEX19	peroxisomal biogenesis factor 19
PLK1	polo like kinase 1
POLD2	DNA polymerase delta 2, accessory subunit
POLE3	DNA polymerase epsilon 3, accessory subunit
POLR1A	RNA polymerase I subunit A
POLR2A	RNA polymerase II subunit A
PRDX3	peroxiredoxin 3
PSAP	prosaposin
ROS	reactive oxygen species
SLC25A5	solute carrier family 25 member 5
SMARCA5	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5
STAT3	signal transducer and activator of transcription 3
SUGP1	SURP and G-patch domain containing 1
TIMM13	translocase of inner mitochondrial membrane 13
TIMM23	translocase of inner mitochondrial membrane 23
TIMM9	translocase of inner mitochondrial membrane 9
VDAC1	voltage dependent anion channel 1
VDAC3	voltage dependent anion channel 3
VTN	vitronectin
XAB2	XPA binding protein 2
XPC	XPC complex subunit, DNA damage recognition and repair factor