

Supplementary Table S4 Signaling pathways and identified proteins involved

Pathway	Category:Id <sup>b)</sup>	Protein (SSP) <sup>c)</sup>	P adj. <sup>d)</sup>	P-value	Cluster <sup>a)</sup>
Metabolism of carbohydrate	Reactome:474	Dihydrolipoyl dehydrogenase (66) α-enolase (96, 103, 104, 105, 106, 110) γ-enolase (107) fructose.bisphosphate aldolase A (134) fructose-bisphosphate aldolase C (132) LDH-B (147, 149) mAspAT (129) Mdh1 (151) phosphoglycerate mutase 1 (184, 187) transaldolase (137) triosephosphate isomerase (193, 194)	6.97E-06	2.32E-07	4, 14, 15
Metabolism of amino acids	Reactome:13	Dihydrolipoyl dehydrogenase (66) mAspAT (129) PA28 α (177) PA28 β (174) proteasome subunit α3 (181) 26S proteasome non-ATPase 14 (155)	0.0788	0.027	4, 15
DNA Replication	Reactome:383	MCM7 (6, 19) PA28 α (177) PA28 β (174) PCNA (157) proteasome subunit α3 (181) 26S proteasome non-ATPase 14 (155)	0.0497	0.0084	4, 14, 15
Cell Cycle Checkpoints	Reactome:1538	DNA replication licensing factor MCM7 (6, 19) PA28 α (177) PA28 β (174) proteasome subunit α3 (181) 26S proteasome non-ATPase 14 (155)	0.077	0.0293	4, 15
Antigen processing and presentation	KEGG:hsa04612	ERp60 (62, 64, 63) GRP-78 (25, 26, 27) HSP90AB (153) PA28 α (177) PA28 β (174)	0.0973	0.0059	4, 15
FAS signaling pathway ( CD95 )	BioCarta:fasPathway	Lamin-B1 (41)	0.0118	0.0026	2R

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		PAK-2 (57) Rho GDI 2 (206)			
Metabolism of carbohydrate	Reactome:474	$\alpha$ -Enolase (103) citrate synthase (118) fructose.bisphosphate aldolase A (134) LDH-B (147, 149) mAspAT (129) Mdh2 (152) phosphoglycerate mutase 1 (184)	0.0017	6.93E-05	7R
Integration of energy metabolism	Reactome:1505	$\alpha$ -Enolase (103) citrate synthase (118) fatty acid synthase (96) fructose.bisphosphate aldolase A (134) Mdh2 (152) phosphoglycerate mutase 1 (184)	0.0425	0.0035	7R
Pyruvate metabolism and TCA cycle	Reactome:1046	Citrate synthase (118) LDH-B (147, 149) Mdh2 (152)	0.00435	0.0012	9R
Glyoxylate and dicarboxylate metabolism	KEGG:hsa630	Citrate synthase (118) Mdh2 (152)	0.0518	0.0059	10R
Regulation of actin cytoskeleton	KEGG:hsa4810	$\beta$ -Actin (115, 114, 112, 121, 127, 122, 162, 173, 198) Arp2/3 (221) cofilin-1 (222) ezrin (21) myosin regulatory 12A (216) PAK-2 (57)	0.2514	0.0149	Ramos

- Cluster numbers referring to those in Figures 3 and 4. Ramos corresponds to entire Ramos data set (all proteins in Fig. 4).
- Category referring to signaling pathway and the identification code in the pathway.
- Sample spot number (SSP) referring to those in Figure 2 and Table S2.
- P-value adjusted by the Benjamini multiple test adjustment.