KEGG category	ID	Description	P-v	alue of e	nrichme	Main functional class					
			Α	В	С	D	E	F	Entry	Carcino- genesis	Infectious diseases
4.1 Transport and	hsa04144	Endocytosis			4.8E-11			3.9E-08			
catabolism	hsa04145	Phagosome	5.4E-05								
4.2 Cell motility	hsa04810	Regulation of actin cytoskeleton		2.0E-06				3.8E-12			
	hsa04510	Focal adhesion		1.7E-06		2.9E-06		6.7E-20			
	hsa04520	Adherens junction			7.6E–07	6.5E–09		2.6E-08			
	hsa04530	Tight junction			1.1E-06	8.3E-05					
	hsa04540	Gap junction						1.8E-04			
	hsa04010	MAPK signaling pathway					8.4E-06	7.7E–05			
	hsa04012	ErbB signaling pathway						1.6E-18			
	hsa04014	Ras signaling pathway						8.1E-12			
	hsa04015	Rap1 signaling pathway			5.3E-08			3.6E-10			
	hsa04020	Calcium signaling pathway						2.1E-04			
	hsa04064	NF–kappa B signaling pathway					8.8E-07				
	hsa04066	HIF–1 signaling pathway						3.5E-07			
	hsa04068	FoxO signaling pathway						3.2E-07			
	hsa04071	Sphingolipid signaling pathway						8.0E-04			
	hsa04072	Phospholipase D signaling pathway						3.3E-11			
	hsa04150	mTOR signaling pathway						2.7E-04			
	hsa04151	PI3K–Akt signaling pathway		1.1E-04				2.7E-09			
	hsa04350	TGF–beta signaling pathway			1.2E-06	1					
	hsa04390	Hippo signaling pathway			1.5E-10						
	hsa04668	TNF signaling pathway					1.7E-05				
3.3 Signaling molecules and interaction	hsa04512	ECM–receptor interaction		1.7E-06							
4.3 Cell growth and death	hsa04210	Apoptosis					5.2E–05				

S6 Table. KEGG pathways enriched in the six main protein complex groups

KEGG category	ID	Description	P-v	value of e	nrichme	Main functional class					
			A	В	С	D	Е	F	Entry	Carcino- genesis	Infectious diseases
5.1 Immune system	hsa04612	Antigen processing and presentation	3.5E-10								
	hsa04620	Toll–like receptor signaling pathway					1.7E-06				
	hsa04622	RIG–I–like receptor signaling pathway					1.8E-07				
5.2 Endocrine system	hsa04910	Insulin signaling pathway						3.9E-07			
	hsa04915	Estrogen signaling pathway						1.3E-09			
	hsa04917	Prolactin signaling pathway						3.2E-07			
	hsa04920	Adipocytokine signaling pathway					1.7E-05				
6.7 Endocrine and	hsa04931	Insulin resistance						6.7E–05			
metabolic diseases	hsa04933	AGE–RAGE signaling pathway in diabetic complications			5.0E–09						
5.9 Aging	hsa04213	Longevity regulating pathway – multiple species						3.4E04			
6.1 Cancers: Overview	hsa05200	Pathways in cancer			4.7E–04		8.6E-04	5.1E-10			
	hsa05205	Proteoglycans in cancer		9.9E-05		8.7E-04		6.7E–20			
	hsa05206	MicroRNAs in cancer						2.0E-07			
	hsa05230	Central carbon metabolism in cancer						5.6E-10			
	hsa05231	Choline metabolism in cancer						2.6E-08			
6.9 Infectious diseases: Viral	hsa05160	Hepatitis C					4.2E-05	2.1E-04			
	hsa05161	Hepatitis B					1.0E-05	3.4E-04			
	hsa05168	Herpes simplex infection	8.8E-05				4.0E-05				
6.10 Infectious diseases: Parasitic	hsa05145	Toxoplasmosis					1.9E04				

S6 Table. KEGG pathways enriched in the six main protein complex groups (continued)