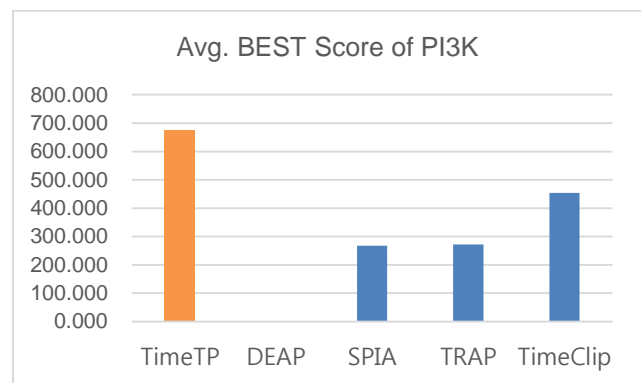


Tool	pathwayID	pathwayName	Avg. BEST Score of PI3K
TimeTP	hsa04012	ErbB signaling pathway	34.417
	hsa04068	FoxO signaling pathway	39.465
	hsa04114	Oocyte meiosis	17.719
	hsa04151	PI3K-Akt signaling pathway	5888.045
	hsa04310	Wnt signaling pathway	203.205
	hsa04510	Focal adhesion	455.123
	hsa04520	Adherens junction	81.145
	hsa04666	Fc gamma R-mediated phagocytosis	0.000
	hsa04810	Regulation of actin cytoskeleton	21.974
	hsa04921	Oxytocin signaling pathway	0.000
DEAP	hsa04721	Synaptic vesicle cycle	0.000
SPIA	hsa04350	TGF-beta signaling pathway	7.100
	hsa04510	Focal adhesion	455.123
	hsa04512	ECM-receptor interaction	14.104
	hsa04630	Jak-STAT signaling pathway	135.708
	hsa05222	Small cell lung cancer	725.022
TRAP	hsa04010	MAPK signaling pathway	550.741
	hsa04015	Rap1 signaling pathway	4.825
	hsa04022	cGMP-PKG signaling pathway	8.847
	hsa04060	Cytokine-cytokine receptor interaction	12.712
	hsa04062	Chemokine signaling pathway	11.871
	hsa04080	Neuroactive ligand-receptor interaction	3.869
	hsa04151	PI3K-Akt signaling pathway	5888.045
	hsa04270	Vascular smooth muscle contraction	2.536
	hsa04510	Focal adhesion	455.123
	hsa04512	ECM-receptor interaction	14.104
	hsa04540	Gap junction	69.789
	hsa04611	Platelet activation	143.910
	hsa04668	TNF signaling pathway	1.459
	hsa04720	Long-term potentiation	74.123
	hsa04723	Retrograde endocannabinoid signaling	0.000
	hsa04724	Glutamatergic synapse	5.982
	hsa04730	Long-term depression	25.106
	hsa04740	Olfactory transduction	3.396
	hsa04744	Phototransduction	2.279
	hsa04912	GnRH signaling pathway	2.167
	hsa04921	Oxytocin signaling pathway	0.000
	hsa04970	Salivary secretion	0.190
	hsa04971	Gastric acid secretion	2.988
	hsa05010	Alzheimer's disease	287.818
	hsa05133	Pertussis	115.092
	hsa05134	Legionellosis	0.000
	hsa05140	Leishmaniasis	17.211
	hsa05143	African trypanosomiasis	0.000
	hsa05144	Malaria	20.215
	hsa05146	Amoebiasis	0.577
	hsa05215	Prostate cancer	967.044
	hsa05321	Inflammatory bowel disease (IBD)	93.237
	hsa05323	Rheumatoid arthritis	183.177
TimeClip	hsa00140	Steroid hormone biosynthesis	3.001
	hsa00330	Arginine and proline metabolism	0.000
	hsa00450	Selenocompound metabolism	0.000
	hsa00830	Retinol metabolism	0.000
	hsa04014	Ras signaling pathway	121.478
	hsa04015	Rap1 signaling pathway	4.825
	hsa04080	Neuroactive ligand-receptor interaction	3.869

hsa04110	Cell cycle	1795.028
hsa04115	p53 signaling pathway	54.785
hsa04151	PI3K-Akt signaling pathway	5888.045
hsa04310	Wnt signaling pathway	203.205
hsa04340	Hedgehog signaling pathway	51.371
hsa04370	VEGF signaling pathway	60.658
hsa04510	Focal adhesion	455.123
hsa04512	ECM-receptor interaction	14.104
hsa04622	RIG-I-like receptor signaling pathway	0.000
hsa04630	Jak-STAT signaling pathway	135.708
hsa04960	Aldosterone-regulated sodium reabsorption	0.000
hsa04971	Gastric acid secretion	2.988
hsa05222	Small cell lung cancer	725.022
hsa05412	Arrhythmogenic right ventricular cardiomyopathy (ARVC)	0.000

Avg BEST Score of PI3K	
TimeTP	674.109
DEAP	000.000
SPIA	267.412
TRAP	271.771
TimeClip	453.296



Supplementary Table 4. Pathways detected by TimeTP and other pathway analysis tools and their relevance to PI3K. Relevance to PI3K is evaluated using a state of the art context-aware literature search tool, BEST (<http://best.korea.ac.kr/>).