

Supplementary table 2. Databases integrated in CPSS 2.0

	Item	Source	Species
Reference sequence	Genome	Eesembl (Release 86)	hsa, mmu, dme, cel, dre, gga, ath, bmo, aca, bdi, eca, gma, oar, osa, ptc, sbi, ola, tgu, tni, ssc, vvi, xtr, aly, bta, cin, cre, ggo, mml, ocu, ptr, ata, atr, bra, mtr, ppe, api, hme, lgi, tca, zma, ame, sly, rno, cfa, aga, pab, stu, tru
	Precursor	miRBase (21)	hsa, mmu, dme, cel, dre, gga, ath, bmo, aca, bdi, eca, gma, oar, osa, ptc, sbi, ola, tgu, tni, ssc, vvi, xtr, aly, bta, cin, cre, ggo, mml, ocu, ptr, ata, atr, bra, mtr, ppe, api, hme, lgi, tca, zma, ame, sly, rno, cfa, aga, pab, stu
	Mature miRNA	miRBase (21)	hsa, mmu, dme, cel, dre, gga, ath, bmo, aca, bdi, eca, gma, oar, osa, ptc, sbi, ola, tgu, tni, ssc, vvi, xtr, aly, bta, cin, cre, ggo, mml, ocu, ptr, ata, atr, bra, mtr, ppe, api, hme, lgi, tca, zma, ame, sly, rno, cfa, aga, pab, stu
	mRNA	Eesembl (Release 86)	hsa, mmu, dme, cel, dre, gga, ath, aca, bdi, eca, gma, oar, osa, ptc, sbi, ola, tgu, tni, ssc, vvi, xtr, aly, bta, cin, cre, ggo, mml, ocu, ptr, ata, tru
	Repeats	Repeatmasker	hsa, mmu, dme, cel, ath, bmo, aca, bdi, eca, gma, oar, osa, ptc, sbi, ola, tgu, tni, ssc, vvi, xtr, atr, bra, mtr, ppe, api, hme, lgi, tca, zma, tru
	piRNA	piRbase	hsa, mmu, dme, cel, dre, gga, bmo
	lncRNA	lncRNAdb	hsa, mmu, dme, dre, gga, ath, aly, ame
	circRNA	circBase	hsa, mmu
Annotation	GO	DAVID (6.7)	hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, dre, ggo, tgu, tru, bdi, aca
Pathway	KEGG	KEGG	hsa, mmu, dme, dre
	BBID	DAVID (6.7)	hsa
	EC NUMBER		hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, dre, ggo, tgu, tru, bdi, aca
	PANTHER		hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, ggo, tgu
	REACTOME		hsa, mmu, dme, gga, ocu
Protein domain	BLOCKS	DAVID (6.7)	hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, dre, ggo, tgu, tru
	COG		hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, tni, dre, tgu, tru, aca
	PANTHER Family		hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, ggo
	PANTHER subfamily		hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, ggo
	RFAM		hsa
	PIR superfamily		hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, dre, ggo, tgu, tru, bdi
	PRINTS		hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, dre, ggo, tgu, tru, bdi, aca
	PRODOM		hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, dre, ggo, tgu, tru, bdi
	PROFILE		hsa, mmu
	PROSITE		hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, dre, ggo, tru, bdi, aca
	SCOP class		hsa, mmu
	SCOP family		hsa, mmu
	SCOP fold		hsa, mmu
	SCOP suofamily		hsa, mmu
	SMART		hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, dre, tgu, tru, bdi
SSF	hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, dre, ggo, tgu, tru, bdi		
TIGRFAMS	hsa, mmu, dme, gga, ocu, ath, cel, cin, cre, eca, mml, oar, ola, osa, ptc, ptr, sbi, ssc, vvi, xtr, zma, gma, tni, dre, ggo, tgu, tru, bdi		