A) Isoform level accuracy compared using full length transcript sequencing of species-specific iPSC RNA panTro4 Human Clint/ Susie/ Susie/ gorGor4 ponAbe2 panTro4 (GENCODE Chimpanzee Gorilla Orangutan (CAT) (CAT) (CAT) (Ensembl

	V27)	(CAT)	(CAT)	(CAT)	(OAI)	(OAT)	(OAT)	V91)	•	91)	V90)
Multi-exon collapsed ICE transcripts	19,271	18,863	22,383	14,377	17,455	20,046	13,102	18,60	65 2	20,046	13,102
Exactly matches annotation	14,379 (74.6%)	13,950 (74.0%)	15,137 (67.6%)	10,258 (71.4%)	11,175 (64.0%)	12,789 (63.8%)	6,857 (52.3%)	10,29 (55.09		10,130 50.5%)	5,000 (38.2%)
Fuzzy matches (±8bp) annotation	15,826 (82.1%)	15,485 (82.1%)	17,201 (76.9%)	11,563 (80.4%)	12,755 (73.1%)	14,459 (72.2%)	8,303 (63.4%)	11,99 (64.39	1,995 1.3%) 11,901 (59.4%)		6,426 (49.1%)
B) Non-zo	ero expression e	estimates of speci	es-specific i	PSC RNA-seq ((Kallisto)	C) Incorp	oration of A	Augustus	CGP and	d August	usPB predic
Susie/Orangu	utan (CAT)			-					Clint/ Chimp	Susie/ Gorilla	Susie/ Orangutan
ponAl	be2 (CAT) -		////	-	/////				•		
ponAbe2 (Ensembl V90) -				-				stusPB ve novel	1720	1251	1425
	rilla (CAT) -			-			isoforr				
ŭ	Sor4 (CAT) -			-			Augus	stusCGP	265	192	178
gorGor4 (Ensembl V91)-				-			putativ	e novel	200	102	1,0
	nimp (CAT) -			-			isoforr	n			
panTro4 (CAT) -				-				stusPB	52	48	58
panTro4 (Ens			-				putative paralogous				
Human (GENC	CODE V27)-	1111111111111	1	-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		loci	igous			
	0k	10k 20k 30k 4 Number of g			100k mber of trans	150k 200k scripts	Augus putativ paralo loci		14	11	9
											4

gorGor4

(Ensembl

ponAbe2

(Ensembl