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

	(GENCODE V27)	Chimpanzee (CAT)	Gorilla (CAT)	Orangutan (CAT)	(CAT)	(CAT)	(CAT)	(Ensemb V91)	l (Ĕns	sembl ((Ensembl V90)
Multi-exon collapsed ICE transcripts	19,271	18,863	22,383	14,377	17,455	20,046	13,102	18,66	55 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%)	10,25 (55.0%		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 (64.3%		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	poration of <i>i</i>	AugustusC	GP and	d August	usPB predic
Susie/Orangu	ıtan (CAT) -			-					Clint/ Chimp	Susie/ Gorilla	Susie/ Orangutan
ponAbe2 (CAT) -				-	//////		A				
ponAbe2 (Ensembl V90) -				-				stusPB ve novel	1727	1252	1433
	rilla (CAT) -			-			isoforr				
gorGor4 (CAT) -				-			Augus	stusCGP	267	192	178
gorGor4 (Ensembl V91) -							putativ	e novel			
Clint/Chimp (CAT)							isoforr				
panTro4 (CAT) - panTro4 (Ensembl V91) -							Augus	stusPB	72	64	70
Human (GENC	′		 	-			paralo loci				
	0k	10k 20k 30k 4 Number of g			100k mber of tran	150k 200l scripts	Augus putativ paralo loci		20	12	12

gorGor4

ponAbe2