

Table S8. Performance of IMonitor and other tools on the simulated dataset.

	Peak Memory(MB)	Run Time
Data set of TRB(10^5 sequences)		
IMonitor ^a	325.88M	12m52s
IgBLAST ^b	327.95M	27m46s
Decombinator ^c	209.00M	1m23s
HighV-QUST ^d	-	-
Data set of IGH (10^5 sequences)		
IMonitor ^a	226.22M	21m96s
IgBLAST ^b	196.22M	92m30s
HighV-QUST ^d	-	-

Note: ^a, run with 1cpu and blast (-a 1); ^b, run with 1cpu and iglast (-num_threads 1);

^c, run with command prompt; ^d, run online, send the results to user after 1-2weeks