

## **Additional\_method\_file\_1**

### **Generation of 17 distinct patterns for each RT**

In Sybase Structured Query Language (SQL), the "\_" meta-character means "any character".

Example of SBS automatically carried out in a RT:

**GCCTCTGCCAGATGGCT** (RT)

Base position	Pattern	possible sbsRT
1	_CCTCTGCCAGATGGCT =>	[A, C, T] CCTCTGCCAGATGGCT
2	G_CCTCTGCCAGATGGCT =>	G [A, T, G] CCTCTGCCAGATGGCT
3	GC_TCTGCCAGATGGCT =>	GC [A, T, G] TCTGCCAGATGGCT
4	GCC_CTGCCAGATGGCT =>	GCC [A, C, G] CTGCCAGATGGCT
5	GCCT_TGCCAGATGGCT =>	GCCT [A, T, G] TGCCAGATGGCT
6	GCCTC_GCCAGATGGCT =>	GCCTC [A, C, G] GCCAGATGGCT
7	GCCTCT_CCAGATGGCT =>	GCCTCT [A, C, T] CCAGATGGCT
8	GCCTCTG_CAGATGGCT =>	GCCTCTG [A, T, G] CAGATGGCT
9	GCCTCTGC_AGATGGCT =>	GCCTCTGC [A, C, G] AGATGGCT
10	GCCTCTGCC_GATGGCT =>	GCCTCTGCC [C, T, G] GATGGCT
11	GCCTCTGCCA_ATGGCT =>	GCCTCTGCCA [A, C, T] ATGGCT
12	GCCTCTGCCAG_TGGCT =>	GCCTCTGCCAG [C, T, G] TGGCT
13	GCCTCTGCCAGA_GGCT =>	GCCTCTGCCAGA [A, C, G] GGCT
14	GCCTCTGCCAGAT_GCT =>	GCCTCTGCCAGAT [A, C, T] GCT
15	GCCTCTGCCAGATG_CT =>	GCCTCTGCCAGATG [A, C, T] CT
16	GCCTCTGCCAGATGG_T =>	GCCTCTGCCAGATGG [A, T, G] T
17	GCCTCTGCCAGATGGC_ =>	GCCTCTGCCAGATGGC [A, C, G]

For each RT, the 17 patterns were used to match sbsRT that were present in L-SAGE and Tag-seq experiments.