Quality Score Encoding

In FASTQ files, quality scores are encoded into a compact form, which uses only 1 byte per quality value. In this encoding, the quality score is represented as the character with an ASCII code equal to its value + 33. The following table demonstrates the relationship between the encoding character, its ASCII code, and the quality score represented.



NOTE

When Q-score binning is in use, the subset of Q-scores applied by the bins is displayed.

Table 2 ASCII Characters Encoding Q-scores 0–40

Symbol	ASCII Code	Q- Score	Symbol	ASCII Code	
!	33	0	6	54	21
"	34	1	7	55	22
#	35	2	8	56	23
\$	36	3	9	57	24
%	37	4	:	58	25
&	38	5	•	59	26
1	39	6	<	60	27
(40	7	=	61	28
)	41	8	>	62	29
*	42	9	?	63	30
+	43	10	@	64	31
,	44	11	Α	65	32
-	45	12	В	66	33
	46	13	С	67	34
1	47	14	D	68	35
0	48	15	E	69	36
1	49	16	F	70	37
2	50	17	G	71	38
3	51	18	Н	72	39
4	52	19	1	73	40
5	53	20			

Quality Scores

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