

**Labeling Efficiency-QC**

In the experiment, 1µg RNA is used for labeling. The specific activity (pmol dyes per µg cRNA) of the labeled RNA can be obtained by the following calculation:

$$\text{Specific Activity} = \frac{\text{(pmol per } \mu\text{l dye)}}{\text{(} \mu\text{g per } \mu\text{l cRNA)}}$$

Sample ID	Dye Name	Dye pmol/µl	cRNA Concentration (µg/µl)	Specific Activity*(pmol Dye/µg cRNA)	Volume (µl)	Total Amount (µg)
3_1	Cy3	16.78	0.71886	23.34251	20	14.3772
6_25	Cy3	16.31	0.70795	23.03835	20	14.159
21_20	Cy3	16.32	0.71884	22.70324	20	14.3768
15_11	Cy3	16.15	0.70825	22.80268	20	14.165
17_4	Cy3	16.54	0.7394	22.36949	20	14.788
17_11	Cy3	16.67	0.71212	23.40898	20	14.2424
2_26	Cy3	16.57	0.73789	22.45592	20	14.7578
18_8	Cy3	16.95	0.7583	22.35263	20	15.166
24_14	Cy3	16.02	0.74489	21.50653	20	14.8978
14_21	Cy3	16.69	0.76526	21.80958	20	15.3052
4_4	Cy3	16.72	0.78584	21.2766	20	15.7168
24_22	Cy3	16.97	0.78848	21.52242	20	15.7696

\*For two-color, if the yield is <825 ng and the specific activity is <8.0 pmol Cy3 or Cy5 per µg cRNA do not proceed to the hybridization step. Repeat cRNA preparation.

\*For one-color, if the yield is <1.65µg and the specific activity is <9.0 pmol Cy3 or Cy5 per µg cRNA do not proceed to the hybridization step. Repeat cRNA preparation.