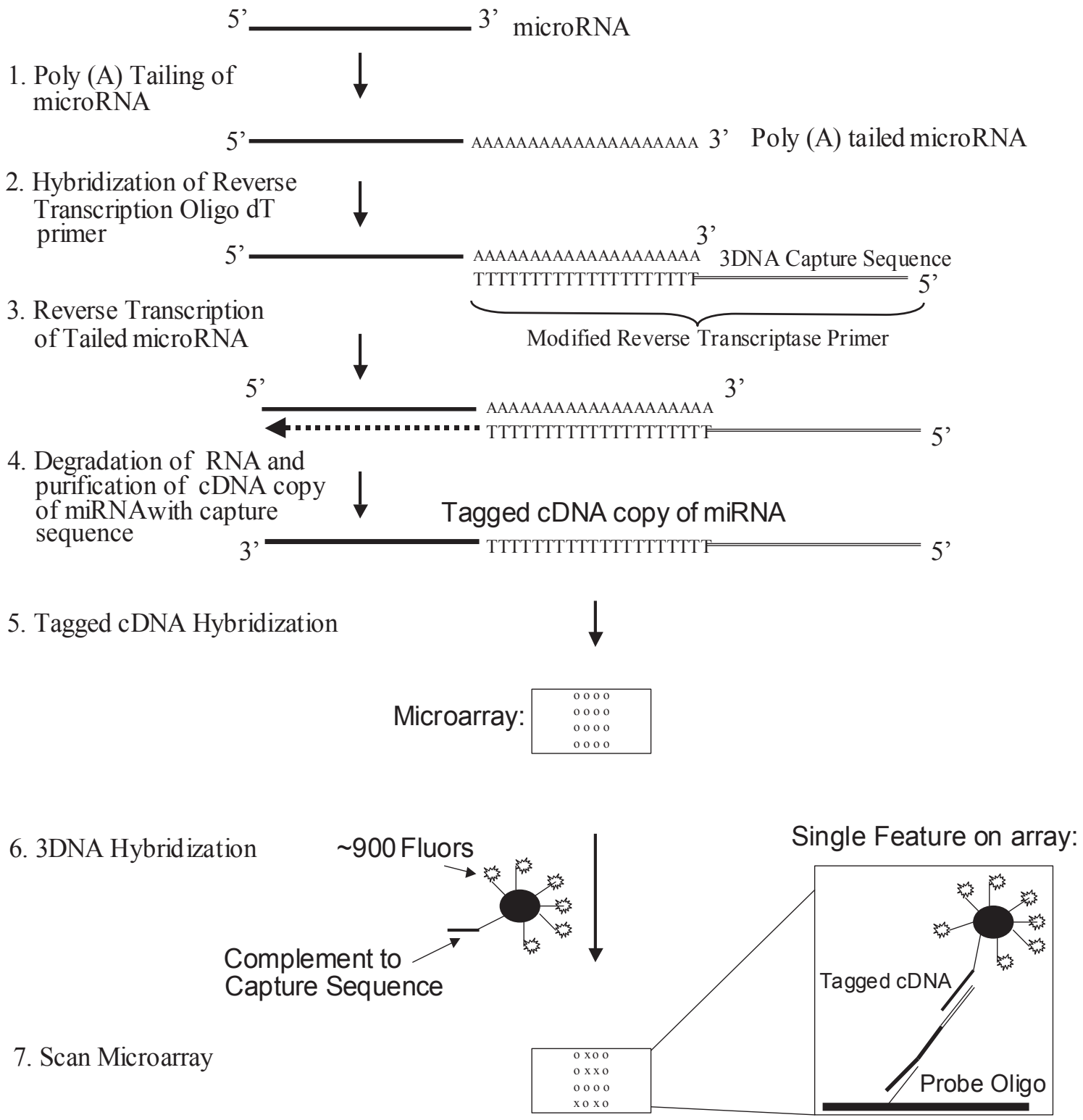
5'
3'
microRNA
1. Poly (A) Tailing of microRNA
5'
AAAAAAAAAAAAAAAAAAAA
3'
Poly (A) tailed microRNA
2. Hybridization of Reverse Transcription Oligo dT primer
5'
3'
AAAAAAAAAAAAAAAAAAAA
3DNA Capture Sequence
TTTTTTTTTTTTTTTTTTTT
5'
Modified Reverse Transcriptase Primer
3. Reverse Transcription of Tailed microRNA
5'
3'
AAAAAAAAAAAAAAAAAAAA
TTTTTTTTTTTTTTTTTTTT
5'
4. Degradation of RNA and purification of cDNA copy of miRNAwith capture sequence
Tagged cDNA copy of miRNA
3'
TTTTTTTTTTTTTTTTTTTT
5'
5. Tagged cDNA Hybridization
Microarray:
o o o o
o o o o
o o o o
o o o o
6. 3DNA Hybridization
~900 Fluors
Complement to Capture Sequence
Single Feature on array:
Tagged cDNA
Probe Oligo
7. Scan Microarray
o x o o
o x x o
o o o o
x o x o