**S6 Table. Additional essential ddPCR metrics as required according to the digital MIQE guidelines (Ref. 34). Data provided summarize all ddPCR experiments performed as part of this study.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Assay** | ***EGFR* T790M** | ***BRAF* V600E** | ***BRAF* V600K** | ***KRAS* G12D** | ***KRAS* G12V** | ***KRAS* G13D** |
| Cycling conditions | 10 min 95°C15 sec 95°C 15 sec 58°C45 sec 60°C10 min 98°C(50 cycles) | 10 min 95°C15 sec 95°C 15 sec 53°C45 sec 60°C10 min 98°C(45 cycles) | 10 min 95°C15 sec 95°C 15 sec 53°C45 sec 60°C10 min 98°C(45 cycles) | 10 min 95°C15 sec 95°C 60 sec 60°C10 min 98°C(45 cycles) | 10 min 95°C15 sec 95°C 60 sec 60°C10 min 98°C(45 cycles) | 10 min 95°C15 sec 95°C 60 sec 60°C10 min 98°C(45 cycles) |
| Total PCR reaction volume | 25 μL | 25 μL | 25 μL | 25 μL | 25 μL | 25 μL |
| Individual partition volume | 5 pL | 5 pL | 5 pL | 5 pL | 5 pL | 5 pL |
| Total intact partitions analyzed per reaction; Mean ± SD (Range) | 4216327± 209387(3603453 -4966439) | 3961420± 235988(3214109 -4397148) | 3786233± 428023(2326784 -4342012) | 4093765± 221102(3580018 - 4572790) | 4023374 ± 190681(3497570 -4341072) | 2572434± 774945(1270067 -3905166) |
| Effect reaction volume analyzed (μL); Mean ± SD (Range) | 21.1± 1.05(18.0 - 24.8) | 19.8± 1.18(16.1 - 22.0) | 18.9 ± 2.15(11.6 - 21.7) | 20.5 ± 1.11(17.9 - 22.9) | 20.1± 0.95(17.5 -21.7) | 12.9 ± 3.87(6.4 -19.5) |
| Mean target copies per partition; Mean ± SD (Range) | 0.0013± 0.00065(0.0003 -0.0053) | 0.0011± 0.00036(0.0002 -0.0028) | 0.0011± 0.00058(0.0005 -0.0032) | 0.0011 ±0.00058(0.0004 - 0.0039) | 0.0011± 0.00046(0.0003 -0.0027) | 0.0014± 0.00067(0.0003 -0.0030) |