**Fig. 3, Source Data 1.** Vmem measurements made with VF-FLIM agree with previously reported values.

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| --- | --- | --- | --- | --- |
|  | VF-FLIM | | Patch-clamp electrophysiology | |
| Cell Line | Resting Vmem (mean ± SEM) | High K+ Vmem (mean ± SEM) | Compiled reported average or median Vmem in cells at rest | Mean of ephys. values |
| A431 | -41 ± 5 | -26 ± 5 | -64 ± 1 (mean ± SEM)42 | -64 |
| CHO | -53 ± 4 | -20 ± 4 | -21 ± 2 (mean ± SEM, 4 cells)81  -31 ± 2.6 (mean ± SEM)82  -35 (ranging -10 to -65 mV)83 | -30 |
| HEK293T | -47 ± 5 | -6 ± 5 | -45 (ranging -40 to -50 mV)84  -52 ± 1 (mean ± SEM)85  -35 ± 2 (mean ± SEM)86 | -44 |
| MCF-7 | -29 ± 5 | 4 ± 5 | -23 ± 1 (median ± SE of median)54  -36 ± 5 (mean ± SEM)87  -41 ± 20 (mean ± SD)53  -42 (no error given)88  -42 ± 5 (mean ± SEM)89 | -36 |
| MDA-MB-231 | -38 ± 5 | -15 ± 5 | -19 ± 3 (mean ± SEM)90  -26 ± 8 (mean ± SEM)91  -39 ± 5 (mean ± SEM)87 | -28 |

**Fig. 3, Source Data 1.** Vmem measurements made with VF-FLIM agree with previously reported values. Comparison of optically-determined resting membrane potential values (in millivolts) and previously reported values. This table summarizes data presented in Fig. 3 and Fig. 3 – supplement 1. Optically determined membrane potentials were calculated from lifetime-Vmem standard curves (Fig. 2 – source data 1). For tabulated literature values, measures of error and central tendency were used from the original publication. In some cases, none were given or only ranges were discussed. The mean of the reported ephys values is the mean of the values listed here. Sample sizes for resting and elevated K+, respectively: A431 1056, 368; CHO 2410, 1310; HEK293T 1613, 520; MCF-7 1259, 681; MDA-MB-231 1840, 558.