

**A high-content screen reveals new small-molecule enhancers of Ras/Mapk signaling as probes for zebrafish heart development.**

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**Supplementary Figure Legends**

**Supplementary Figure S1: Three-point dose response pre-screen on 27 repurchased primary confirmed hits.**

**Supplementary Figure S2: Dose-response curves for compounds that were not selected for follow-up studies.**

**Supplementary Figure S3: SAR studies of ST006994 analogs from the UPCMLD library.**

**Supplementary Figure S4: Representative Chemical Complementation assay shows new compounds do not inhibit DUSP6.** Data are the averages  $\pm$  SEM. BCI, n=4; ST006994, n=3 (repurchased materials that confirmed in LC-MS). For ST006994 errors are smaller than the symbols. ST011282 n=1.