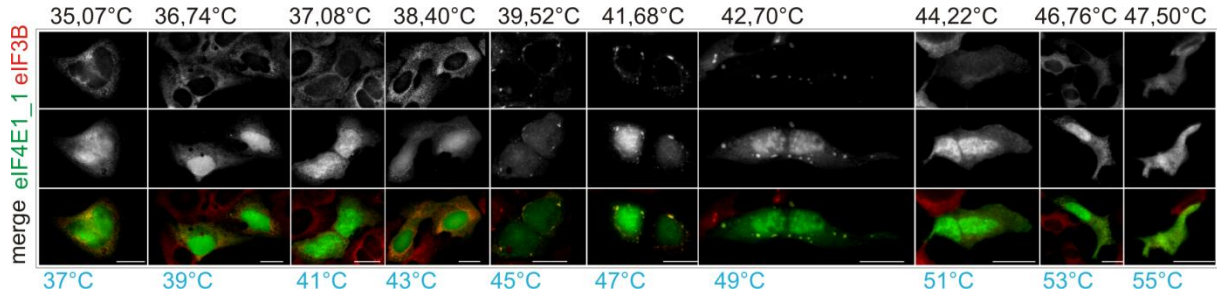


1 **Additional figure 1. Precise optimization and accurate calibration of temperature measurement**
2 **were essential for efficient and reproducible SGs formation.**

3



4

5 U2OS cells were grown on a glass coverslip and transfected with an expression vector coding for the
6 GFP-eIF4E1_1 fusion protein. Nineteen hours post-transfection, the cultivation dish was placed on a pre-
7 heated thermoblock, and a submersible temperature probe was placed into the medium in direct contact
8 with the coverslip. The medium was subsequently exchanged with another one pre-warmed to the
9 required temperature. The dish containing the coverslip was closed, covered with a plastic box and
10 incubated on the thermoblock for 30 min. Temperatures of the pre-warmed medium and the thermoblock
11 were set experimentally to reach the required temperature on the coverslip. The temperature was read at
12 the beginning and at the end of the treatment. The calculated mean temperature values are displayed
13 above each panel. The corresponding temperature values that were set on the thermoblock are shown
14 below each panel in blue. Following heat shock, cells were fixed and assessed for eIF3B-stained SGs. The
15 temperature gradient clearly shows that only a narrow range of high-fevered temperatures was suitable for
16 the efficient induction of SG formation. Scale bar, 20 μ m.