

5-Fluorouracil affects assembly of stress granules based on RNA incorporation

Christian Kaehler, Jörg Isensee, Tim Hucho, Hans Lehrach and Sylvia Krobitsch

Figure S1. Time-course of 5-FU-induced SG assembly. HeLa cells were treated with increasing concentrations of 5-FU for the indicated time periods and processed for immunostaining of the SG marker protein TIAR. Nuclei were stained with Hoechst. Scale bars represent 20 μm .

Figure S2. 5-FU induction of SGs is a general cellular phenomenon. DU145, RWPE-1, A549, HepG2, HEK293T, or WI-38 cells were treated with the indicated 5-FU concentrations for 72 h. Afterward, the SG marker protein TIAR was visualized and analyzed by microscopy. Nuclei were stained with Hoechst. Scale bars represent 20 μm .

Figure S3. SGs induced by the RNA incorporating 5-FU metabolite sequester RACK1 and display altered disassembly properties. HeLa cells were treated with 0.5 μM FUrd for 72 h or subsequently recovered from FUrd treatment for additional 72 h. As control HeLa cells were treated with 0.5 mM arsenite for 1 h and subsequently recovered for 120 min. Localization of RACK1 (green) and ATXN2 (red) was studied. Nuclei were stained with Hoechst. Scale bars represent 20 μm .

Figure S4. 5-FU metabolites have an effect on P-bodies. HeLa cells were treated with increasing concentrations of the 5-FU metabolites **(A)** FUrd or **(B)** FdUrd for 72 h, DDX6 (red) and DCP1 (green) were visualized and analyzed by confocal microscopy. Nuclei were stained with Hoechst. Scale bars represent 20 μm .







