

General procedure for light release

The following operation procedure is only the basic version of light release experiment. In order to obtain the best results, the experimental conditions can be fine-tuned.

1. The washed resin was resuspended in 1 ml PBS and transferred to a clear glass vial or quartz cuvette with a sealed cap.
2. Irradiate the resin suspension for 1 hour under the light of 345-375nm with constant stirring. Can be done with a handheld long-wave UV lamp (eg UVGL-25.1)
3. Stir the sample at 37 ° C for 1 hour after irradiation. Avoid using stir bars, which can crush some resins.
4. The eluate is collected by centrifugation or use an empty centrifuge column.
5. The resin was resuspended in 1 ml PBS and stirred for 2-16 hours. For more efficient recovery of enriched proteins, use a buffer containing 0.1-1% detergent or 250mM-1M NaCl.
6. Collect the second eluate by centrifugation or by using an empty centrifuge column.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Poor light release	Not strong enough	Use high intensity lights
	Incorrect wavelength	Make sure the light output by the lamp is in the range of 345-368nm
	Insufficient stirring	Make sure the beads mix properly during light release
	Strong non-specific interaction	Consider using detergent during photo release or include more washing steps after photo release