# GENERAL PROCEDURE FOR PHOTO RELEASE

This general protocol for the photo release may be used as a starting point. For optimal result, slight tuning of experimental conditions might be required.

1. Re-suspend the washed resin in 1ml of PBS and transfer to a clear glass vial or quartz cuvette with a tight fitting cap.
2. Irradiate the resin suspension with light at 345-375nm with constant agitation for 1hr. This can be done using hand held long wave UV lamp such as a UVGL-25.1
3. Agitate the sample at 37°C for 1hr after irradiation. Avoid using a stir bar as this can crush some resins.
4. Collect the eluant by centrifugation or using an empty spin column.
5. Re-suspend the resin in 1ml of PBS and agitate for 2-16hrs. For more efficient recovery of enriched protein(s), use a buffer containing 0.1-1% detergent and/or 250mM - 1M NaCl.
6. Collect the second elution by centrifugation or using an empty spin column.

## TROUBLESHOOTING

| Problem | Possible Cause | Solution |
|---|---|---|
| Poor Photo Release | Light is not sufficiently intense | Use a lamp with a higher intensity. |
| | Incorrect wavelength of light | Ensure that the lamp is outputting light in the 345-368nm range. |
| | Insufficient agitation | Ensure that the beads are being properly mixed during photo release |
| | Strong non-specific interactions | Consider using a detergent during photo release or including more wash steps after photo release |