Sugden Lab.

Thrombin cleavage

(using thrombin produced by Amersham)

1. Thrombin cleavage of eluted fusion protein bound to Sepharose

* Mix 50 μ l of thrombin (< 10 cleavage U/ml) solution and 950 μ l of 1 x PBS for each ml of Glutathione Sepharose bed volume

- 1. Add thrombin protease mixture to Glutathione Sepharose pellet
- 2. Gently shake or rotate the suspension at r.t. for 2-16 h
- 3. Centrifuge the suspension at 500 x g for 5' to pellet the beads and carefully transfer the eluted fraction to a clean tube.

2. Thrombin cleavage of eluted fusion protein.

- 1. Add 10 μ l of thrombin solution (10 cleavage units) per mg fusion protein. If the amount of fusion protein in the eluate has not been determined, add 80 μ l (80 U) of thrombin for each ml of Glutathione Sepharose bed volume from with the fusion protein was eluted.
- 2. Mix gently and incubate at r.t. (22-25C) for 2-16 h.
- 3. Once digestion is complete, GST can be removed by first removing glutathione by extensive dialysis (2,000 vol/ml) against 1 x PBS followed by batch purification.