

# Protocol for GST-Fusion Protein Pulldown/Western Blotting Analysis

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## **Preparation of cell lysate**

- 1, transfect cell lines in T-25 flasks with your interest gene;
- 2, lyse cells with IP lysis buffer-PI after 30-48hrs (T25 flask, add 2 ml buffer);
- 3, spin down the lysate to get the super.
- 4, pre-clear lysate with blank beads  
(1ml lysate : 80ul blank beads----tumble it for 1 hr @ 4C);
- 5, spin down to collect the super.

## **Pulldown**

- 1, Pre-clear lysate (100ul) + GST-fusion protein (elusion protein, not beads) ---- incubate it @4C for 1 hr;
- 2, add blank beads 10ul to each reaction tube and tumble @4C for 1hr;
- 3, Spin down and remove the super.
- 4, wash the beads 3 times with IP-PI buffer;

## **SDS-PAGE and Transfer**

- 1, add IP buffer 5ul and 2X loading buffer 10 ul and 2-ME 3ul ;
- 2, boil it for 10 mins
- 3, load it on SDS-PAG,
- 4, Run: 180V and 30mA for 1hr to 1:20 hrs;
- 5, transfer proteins to the membrane: 250mA + 40mins to 60mins(depends on the MW of target protein)

## **Western Blotting**

- Blackening(90mins);  
1<sup>st</sup> antibody incubation(60-90min)  
wash 3 times  
2<sup>nd</sup> antibody incubation(30-40min)  
wash 3 times  
add the ECL detection reagent mix and wait for 1 min  
expose the membrane.