

We provide services to:

- Research Institutes
- Universities
- Agricultural Industries

**WE DELIVER  
LEADING EDGE  
PROTEOMIC  
SERVICES**

**co-IP &  
MASS SPEC**  
for protein interactions

## APAF - AUSTRALIA'S PREMIER PROTEOMICS PROVIDER SINCE 1995

APAF's mission is to assist the scientific community address their protein analysis needs. Australian Government support has enabled APAF to create a world-leading proteomics analysis facility containing the latest infrastructure for advanced protein analysis. Our strengths in comparative analysis, along with absolute protein quantitation, have increased our capabilities to deliver leading edge proteomic services.

### co-IMMUNOPRECIPITATION EXPLAINED

co-Immunoprecipitation, co-IP, is a technique used to isolate protein complexes through the use of affinity interactions. co-IP is typically used in a serial manner to evaluate interactions of one protein at a time. It requires advanced knowledge of the likely interacting partners and a useful antibody to blot for its detection. As an alternate, mass spectrometry can be used to determine the identity of co-immunoprecipitated proteins. The clear advantage is that no prior knowledge of the likely interacting partners is required. By targeting a *known* member with an antibody and utilising mass spectrometry it may be possible to isolate the entire protein complex and thereby identify *unknown* members. This concept of isolating protein complexes from cell lysates is sometimes referred to as a "pull-down". co-IP is a powerful technique that is used regularly by cell biologists to analyse protein-protein interactions.

The bait protein may be bound by an antibody, or be a protein construct that can be affinity isolated through a moiety or domain.

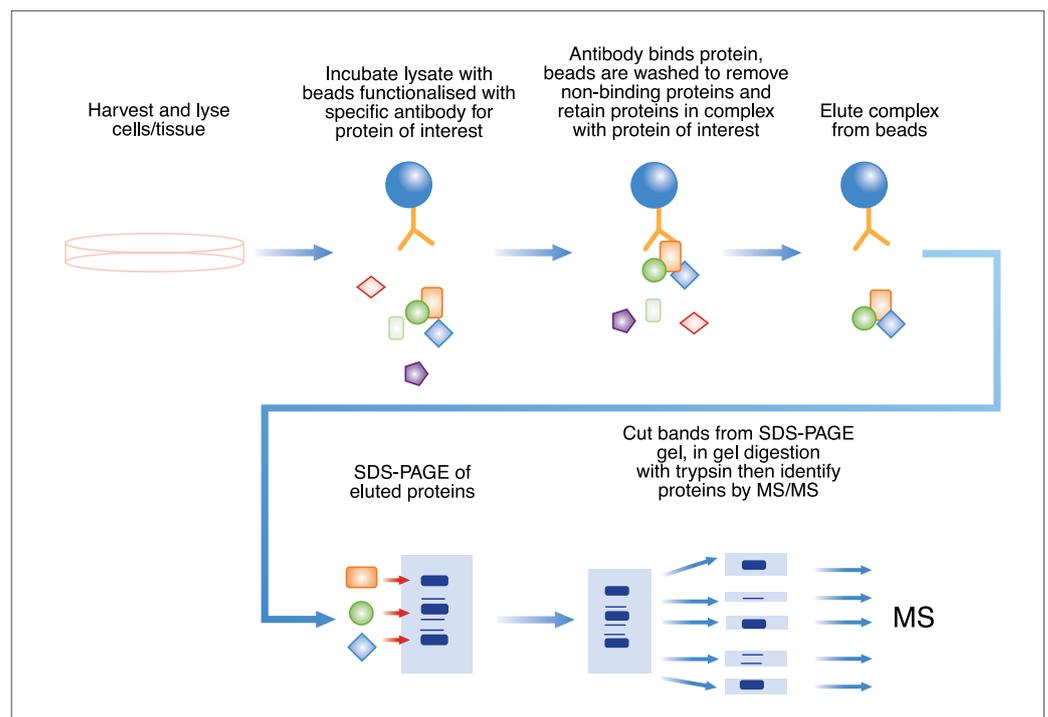
### BENEFITS:

- Less expensive than multiple antibodies
- Discovering unknown protein interactions
- No prior knowledge of protein complex members needed
- Several proteins can be identified

### OUR EXPERTISE INCLUDES:

1. Latest Mass Spectrometers
2. 17+ years of experience
3. 1D Gel electrophoresis
4. Sample handling of Gel bands

### DISCOVERING PROTEIN INTERACTIONS USING co-IP AND MASS SPECTROMETRY



**APAF**

australian proteome  
analysis facility

### ENQUIRE NOW!

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