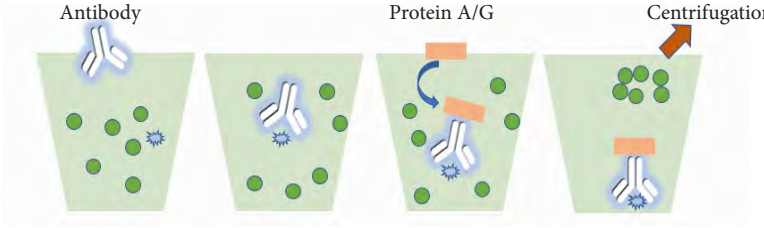
Heavy/light chain contamination on Western Blot ?

Featured IPKine™ secondary antibody for Western Blot after Immunoprecipitation

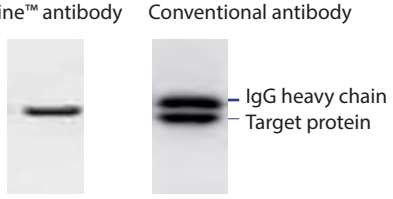
25 kD or 50 kD protein detection on Western blots after Immunoprecipitation is often suffered from heavy or light chain blotting contamination. Abbkine's IPKine™ products could solve these problems and bring you satisfying results with good performance.

Immunoprecipitation (IP) is the technique of precipitating a protein antigen out of solution using an antibody that specifically binds to that particular protein. The antigen-antibody complex are precipitatied by affinity beads incubation. After the washing and centrifugating process, a western blot will be conducted to detect the target protein.



When anti-IgG (H+L) antibodies are applied to detect protein bands on Western blots after immunoprecipitation, two unexpected bands appear corresponding to the heavy (50 kDa) and light chains (25 kDa) of the precipitated primary antibody. These bands usually obscure detection of any protein of interest with a molecular weight near 50 kDa or 25 kDa. Abbkine's IPKine™ products could solve these problems by eliminating heavy and light chains interference, seperately.

" Detecting the NUP50 protein by IPKine Mouse Anti-Rabbit IgG LCS shows perfect performance, solving the heavy chain trouble! "



Features & benefits

- Trail package size available and high cost-performance
- Less background noise, obtaining cleanest and clearest target band
- Excellent to avoid interference of antibody heavy/light chains
- Simple to use, no additional steps or reagents are required
- Minimized cross-reactivity with IgG of other species as well

Ordering information

Product Name	Specifity	Cat. No.	Size
IPKine™ HRP Goat Anti-Mouse IgG LCS	Light chain specific	A25012	100/500 ul
IPKine™ HRP Mouse Anti-Rabbit IgG LCS		A25022	100/500 ul
IPKine™ HRP, Goat Anti-Mouse IgG HCS	Heavy chain specific	A25112	100/500 ul
IPKine™ HRP, Goat Anti-Rabbit IgG HCS		A25222	100/500 ul

For more information, visit Abbkine Scientific: http://www.abbkine.com
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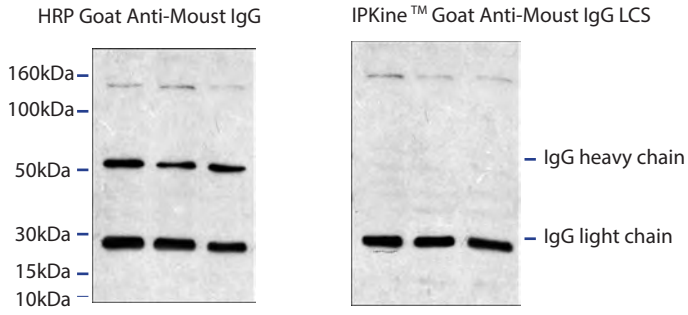
Abbkine's IPKine heavy chain secondary antibody reacts with Fc portion of mouse or rabbit IgG heavy chain, and it doesn't react with the Fab portion of IgG. It's cross-reactivity with bovine, horse and human serum proteins has been specially minimized (anti-rabbit antibody only absorbed with human serum protein).

IPKine light chain reacts with kappa light chain on mouse/rabbit IgG. It doesn't react with the heavy chain of IgG. It's cross-reactivity with human, rat, goat, sheep, bovine serum proteins has been specially minimized.

✔ IPKine™ LCS antibody for target protein approaching 50 kDa

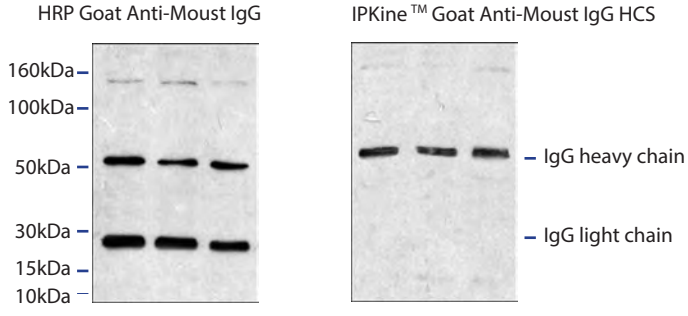
If the size of your target protein is close to 50 kDa, in order to avoid interference of the antibody heavy chain , we recommend using light chain specific secondary antibodies.



Product Name	Cat. No.	Size	Application
IPKine™ HRP Goat Anti-Mouse IgG LCS	A25012	100/500 ul	IP, WB
IPKine™ HRP Mouse Anti-Rabbit IgG LCS	A25022	100/500 ul	IP, WB

✔ IPKine™ HCS antibody for target protein approaching 25 kDa

In case your target protein is close to 25 kDa, we recommend using heavy chain specific secondary antibodies, which specifically bind only heavy chain of IgG thus to avoid IgG light chain interference.



Product Name	Cat. No.	Size	Application
IPKine™ HRP, Goat Anti-Mouse IgG HCS	A25112	100/500 ul	IP, WB
IPKine™ HRP, Goat Anti-Rabbit IgG HCS	A25222	100/500 ul	IP, WB

Protocol FAQ and tips

- Generally, polyclonal antibody is the best choice for immunoprecipitation. Besides, the purified monoclonal antibody, ascites, hybridoma supernatant can also be used for IP.
- Although IPKine LCS antibodies react strongly with native IgG light chains. Therefore, they are not recommended for sensitive detection and quantitation of reduced and denatured light chains on Western blot Co-IPs.
- It is important to consider the proportion of antibody/buffer before the experiment. The antigen could not be detected if the antibody is too little; otherwise, too much antibodies could not be settled on the beads, remaining in the supernatant. Like this, the antigen may not be dissolved due to less buffer, and the antigen will be diluted if there are too much buffer solutions.
- Too little protein is available? The possible reasons are as follows: low content of target protein in the sample; too little protein A/G-beads; the degradation of proteins; too many impure proteins; low concentration of antibody; poor affinity of antibody.

For more information, visit Abbkine Scientific: http://www.abbkine.com
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