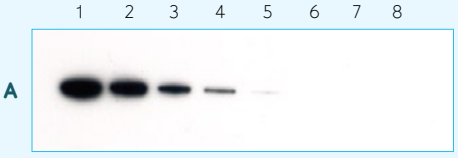
Blocking buffers are used at lower concentrations with the SNAP i.d. system.

Our proprietary blot holders and actively-driven reagent process ensure that the pores of the membrane are adequately blocked. Likewise, wash steps actively flush the membrane instead of just rinsing the surface.

The design of the SNAP i.d. system requires that antibodies be used at three times the normal concentration but in only one third of the volume, so you can get the same or better results with the same amount of antibody!

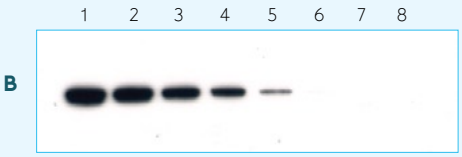
Standard Western Blot

5% NFDM

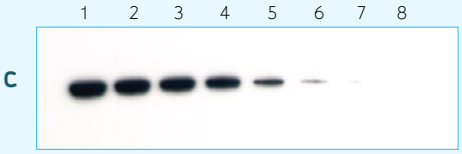


SNAP i.d. Protein Detection System

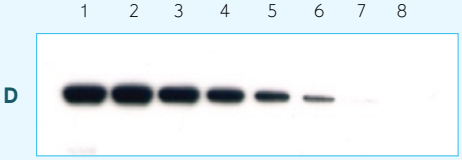
0.5% NFDM



0.1% NFDM



0.05% NFDM



Improve your signal! Use low concentrations of blocking reagents with the SNAP i.d. system to improve quality.

Non-Fat Dry Milk (NFDM) is an efficient blocking solution commonly used in western blotting; however, its high blocking capacity may compromise the protein signal. To demonstrate this, a two-fold dilution series of rat liver lysate (12 µg in lane 1 to 0.09 µg in lane 8) was resolved with SDS-PAGE prior to blotting and immunodetection. (The primary antibody was mouse anti-Glyceraldehyde-3-Phosphate Dehydrogenase (GAPDH); the secondary antibody was HRP-conjugated goat anti-mouse). Blot A used a standard immunodetection protocol (block for 1 hour in 5% NFDM, incubate in primary (1:40,000) or secondary antibody (1:50,000) for one hour, wash three times following incubations).

Blot B, C and D were assembled in SNAP i.d blot holders and blocked for 20 seconds with either 0.5, 0.1 or 0.05% NFDM respectively. The blots were incubated for 10 minutes with anti-GAPDH (1:13,000), washed immediately and incubated for 10 minutes with HRP goat anti-mouse (1:10,000). Results show an increase in sensitivity with a decrease in milk concentration.