

# FireSilver

High sensitive silver staining kit, compatible with protein identification by MS

FireSilver is a high-sensitive silver staining kit with low staining background for protein gels like 2D electrophoresis and SDS-PAGE gels. It offers a detection limit at nanogram level of protein. FireSilver is compatible with subsequent protein identification analysis by mass spectrometry using common protocols with cleanup of proteolytic peptides by reverse phase C18 tips. Thus it has distinct advantages over Coomassie Blue and normal silver staining protocols for detection and identification of proteins or total proteomes.

## FireSilver

- Complete silver staining kit
- High sensitivity down to 60 pg/mm<sup>2</sup> protein
- Very low background signal
- Compatible with protein identification by MS
- Kit for staining of 20 small gels (8 x 7 cm)

## How FireSilver works

- Fixing step, washing step
- Sensitizing step
- Silver incubation step, washing step
- Pre-development and development step
- Stopping step, storage and digitalization of gel



133 66 33 16 8 4 2 1 0,5 0,25 0,12 0,06 0,03

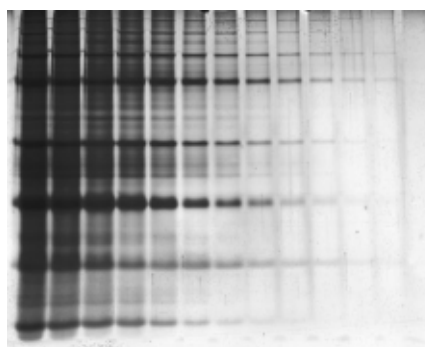


Figure 1: SDS-PAGE (8 x 7 x 0.1 cm) of a dilution series of standard proteins (myosin,  $\beta$ -galactosidase, BSA, ovalbumin, carboanhydrase, trypsin inhibitor and lysozyme) down to 30 pg/mm<sup>2</sup> stained by FireSilver.



Figure 2: FireSilver staining kit for high sensitive protein silver staining of 2DE and SDS-PAGE gels.

## Protein identification by standard methods

- Protein spot picking e.g. by spotXpress robot
- Washing and equilibration of protein spot
- Proteolytic in-gel digestion of protein spot
- Extraction, desalting and concentration of peptides by reversed phase C18 tip
- Protein identification by MALDI MS or nanoLC/ESI MS/MS analysis and database search

Figure 3: High resolution 2D electrophoresis gel (23 x 30 x 0.1 cm) of 100  $\mu$ g mouse kidney protein extract stained by FireSilver.

Product No.

P-S-2001

Product name

FireSilver Staining Kit

Price (Net price)

120 EURO