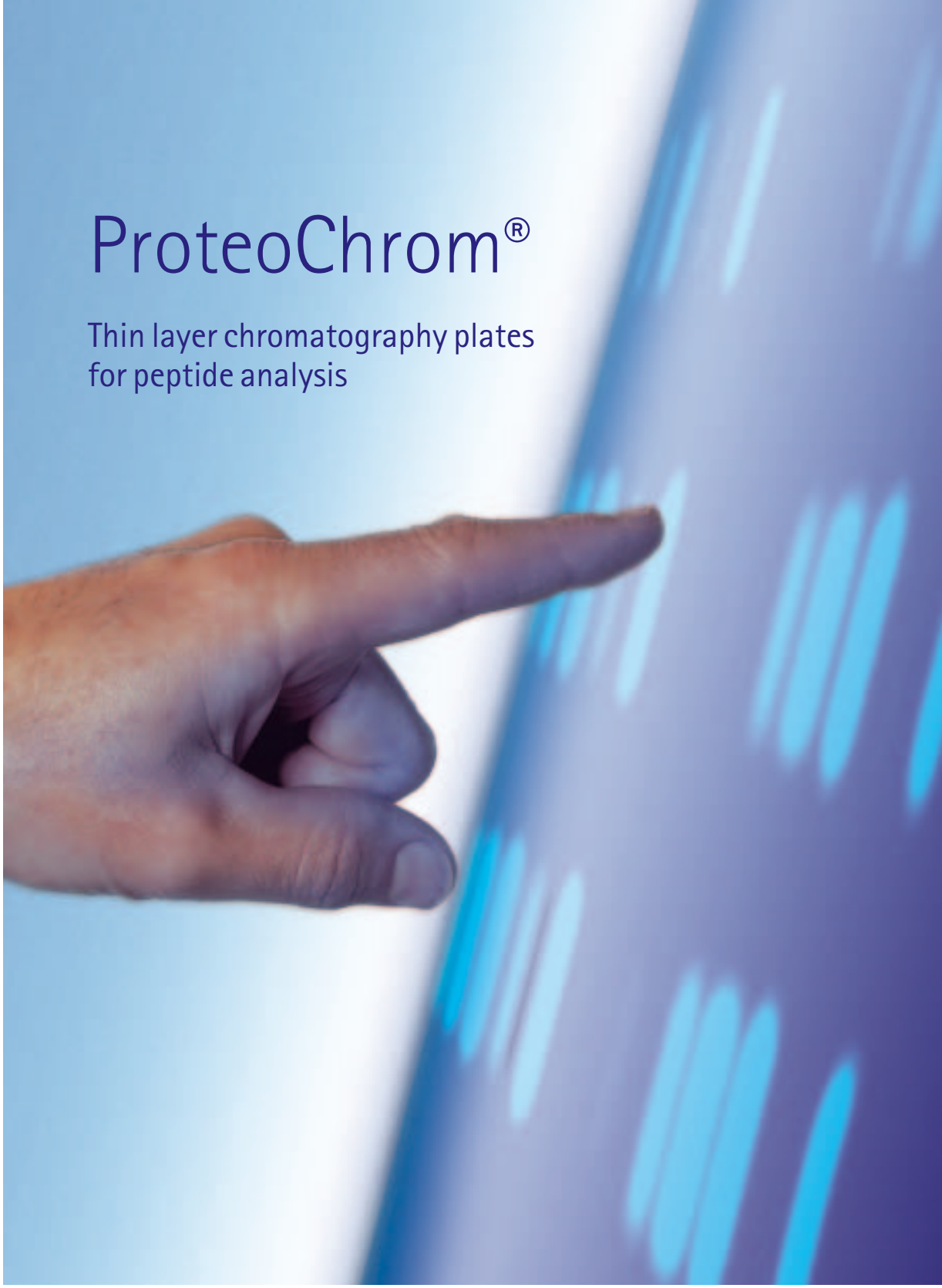
ProteoChrom®

Thin layer chromatography plates
for peptide analysis



MERCK

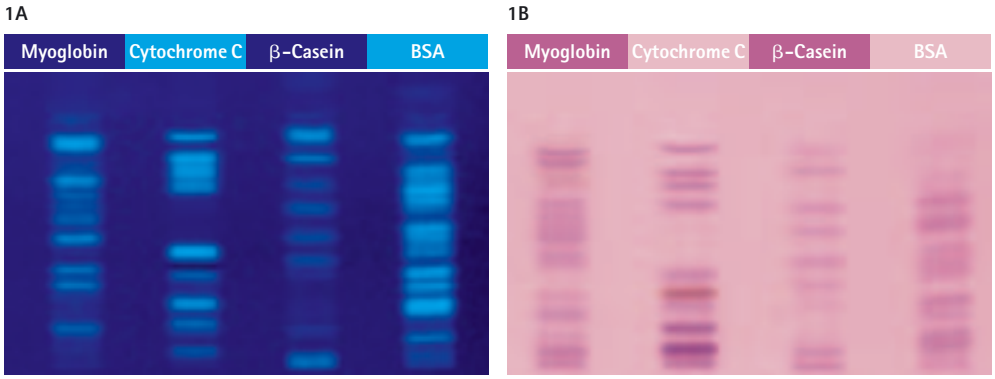
ProteoChrom® HPTLC Silica plates

For fast 1-D separation of peptides and protein digests

ProteoChrom® HPTLC Silica gel 60 F_{254s} plates utilize an extra thin layer of high performance Merck silica gel providing separation characteristics highly efficient for 1-D separation of peptides and protein digests.

Up to 20 peptides can be readily resolved. The extra thin 100 µm silica layer offers high sensitive detection in nanogram level: as low as 1 ng per peptide can be visualized. Due to the special binder composition the plates are highly stable in water and are therefore ideally suited for use with aqueous solvent systems. The 20 x 10 cm format allows separation up to 32 samples in parallel. Classical fluorescamine and ninhydrin visualization procedures have been optimized enabling for highly consistent reproducible results. Each ProteoChrom® package includes detailed instructions for plate development and visualization.

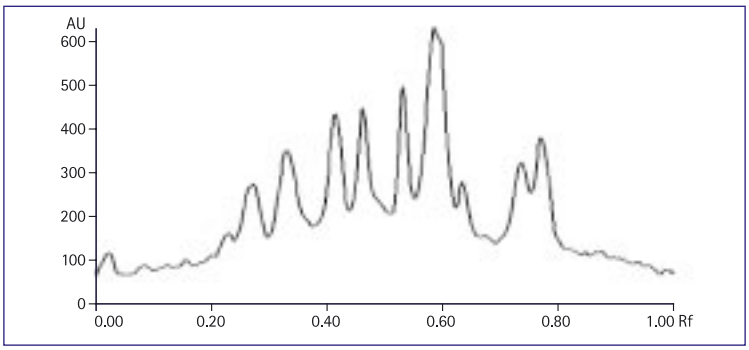
- Resolves up to 20 peptides
- Highly sensitive, allowing detection as low as 1 ng
- Validated for peptide separations
- Includes easy to follow, optimized separation and staining protocols



Sample volume:	*1A: 1,5 µl* *1B: 4 µl*
Concentration:	*2 mg / ml*
Application system:	*Automatic TLC Sampler 4 (CAMAG)*
Mobile phase:	*2-butanol / pyridine / ammonia (25 %) / water (39/34/10/26)*
Migration distance:	*5 cm*
Developing time:	*45 min*
Staining/detection:	*1A: Fluorescamine* *1B: Ninhydrin*

Fig 1: 1-D separation of single protein digests.
Tryptic digests of various proteins were separated on a ProteoChrom® HPTLC Silica gel 60 F_{254s} plate followed by either fluorescamine staining **(1A),** *or staining with ninhydrin* **(1B)**.

Fig 2: Densitogram of a tryptic digest of β-Casein
A tryptic digest of β-Casein was separated on a ProteoChrom® HPTLC Silica gel 60 F_{254s} plate followed by fluorescamine staining and scanned with a CAMAG TLC Scanner III in fluorescence mode at UV 366.



Ordering Information

Packing Material	Format (cm)	Content	Backing	Ord. No.
ProteoChrom® HPTLC Silica gel 60 F_{254s}	20 x 10	25 plates	glass	1.05650.0001

ProteoChrom® HPTLC Cellulose sheets

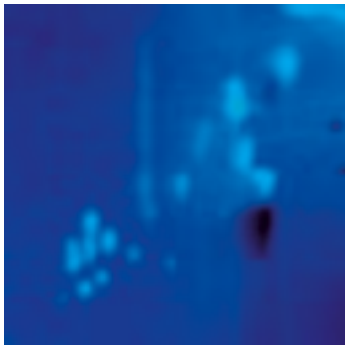
For quick and easy 2-D separation of peptides and protein digests including peptide mapping

Merck ProteoChrom® HPTLC Cellulose sheets are based on an optimized microcrystalline cellulose with an extra thin layer of only 100 µm. It provides separation characteristics highly efficient for 2-D separations of peptides making it especially suited for 2-D peptide mapping studies.

The 10 x 10 cm sheet format conforms exactly with the needs for 2-dimensional separations minimizing diffusion effects. Specially developed protocols covering all steps from development to staining enable for straight forward 2-D high performance thin layer chromatography analysis in only 4 h.

- Just 4 h from protein digest to result
- Validated for peptide separations
- Includes easy to follow 2-D separation protocols

3 A



3 B

Sample volume:	*5 µl*
Concentration:	*2 mg / ml*
Application system:	*Automatic TLC Sampler 4 (CAMAG)*
Mobile phases:	*1st dimension:*
	2-butanol / pyridine / acetic acid / water (30/20/6/24), 1D
	2nd dimension:
	2-butanol / pyridine / ammonia (25 %) / water (39/34/10/26), 2D
Migration distance:	*5 cm*
Migration time:	*1st dimension: 44 min*
	2nd dimension: 50 min
Staining:	*3A: Fluorescamine*
	3B: Ninhydrin

Fig 3: 2-dimensional HPTLC of single protein-digests.
Cytochrome C tryptic digests were 2-D separated on ProteoChrom® HPTLC Cellulose sheet followed by either fluorescamine staining **(3 A)**, *or staining with ninhydrin* **(3 B).**

Ordering Information

Packing Material	Format (cm)	Content	Backing	Ord. No.
ProteoChrom® HPTLC Cellulose sheets	10 x 10	25 sheets	aluminium	1.05651.0001

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