IEF Markers 3-10, SERVA Liquid Mix

SERVA Electrophoresis

- Ready-to-use protein marker for Isoelectric Focusing
- One standard applicable to all IEF gels (vertical/horizontal)
- Purified protein components, salt-free
- 13 isoforms separating in a characteristic pattern
- For determination of pI of unknown protein samples
- For monitoring the separation performance of IEF gels

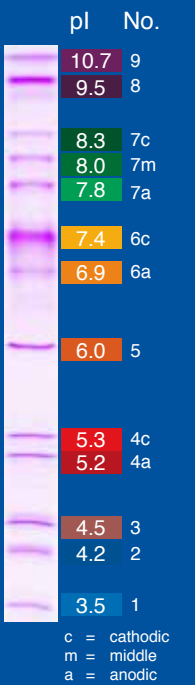
Specifications:	
Overall volume:	0.5 ml, ready-to-use solution
Overall protein content:	approx. 5 mg
Proteins:	9 (13 isoforms); range pI 3.5 to 10.7
Buffer composition:	0.01% Bromphenol Blue (Na-salt), 0.01% Methyl Red (Na-salt), 10% Glycerol
Shelf life:	1 year at -15 °C to -25 °C
Cat. no.	39212.01

Handling:

Apply 5 µl (50 µg) per lane when staining with SERVA Violet 17, SERVA Blue R, SERVA Blue G or Coomassie. For silver staining, dilute 1:10 and apply 5 µl (5 µg) per lane.

When using vertical slab gels (0.75 mm gel thickness and more) it may be advisable to raise the overall protein marker volume up to 20 µl. Using horizontal ultrathin precast gels (e.g., SERVALYT™ PRECOTES™) 50 µg/lane will give optimum results.

The two dyes, 0.01% Bromphenol Blue and 0.01% Methyl Red, will indicate the migration progress. Bromphenol Blue will change from blue to yellow once it reaches the anodic edge below pH 3, Methyl Red will migrate as yellowish band turning red below pH 6 and will focus as distinctive band at pH 3.8. Dyes will be removed from the gel during fixation/staining.

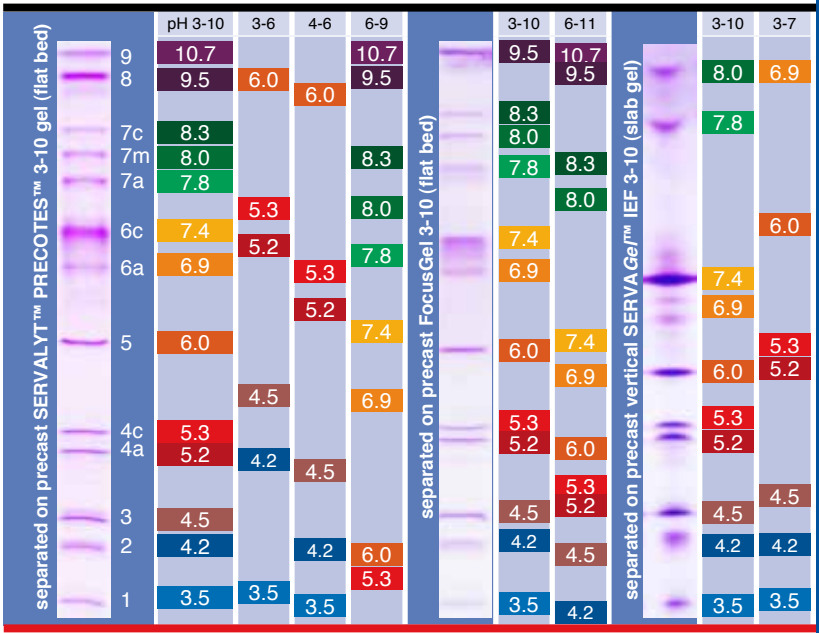


Protein (source)	pI* of main band	No. (band)
Cytochrome C (horse, heart)	10.7	9
Ribonuclease A (bovine, pancreas)	9.5	8
Lectin (Lens culinaris)	8.3, 8.0, 7.8	7 c,m,a
Myoglobin (horse, muscle)	7.4, 6.9**	6 c,a
Carbonic anhydrase (bovine, erythrocytes)	6.0	5
ß-Lactoglobulin (bovine, milk)	5.3, 5.2	4 c,a
Trypsin inhibitor (soybean)	4.5	3
Glucose oxidase (Aspergillus niger)	4.2	2
Amyloglucosidase (Aspergillus niger)	3.5	1

* Temperature: 5 °C Please note that the pI is temperature dependent. pI values have been determined experimentally on horizontal (flatbed) gels.

** Intensities of bands may vary.

Schematic representation of marker bands in various pH fractions



Protein and pI

Cytochrome C	10.7
Ribonuclease A	9.5
Lectin	c, 8.3
Lectin	m, 8.0
Lectin	a, 7.8
Myoglobin	c, 7.4
Myoglobin	a, 6.9
Carbonic anhydrase	6.0
β- Lactoglobulin	c, 5.3
β- Lactoglobulin	a, 5.2
Trypsin inhibitor	4.5
Glucose oxidase	4.2
Amyloglycosidase	3.5

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