

IEF Markers 3-10, SERVA Liquid Mix

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

Specifications:	cat. no. 39212
Overall volume:	0,5 ml, ready-to-use solution
Overall protein content:	approx. 5 mg
Proteins:	9 (13 isoforms); range pI 3.5...10.7
Buffer composition:	0.01% Bromophenol Blue (Na Salt), 0.01% Methyl Red (Na Salt), 10% Glycerol
Shelf life:	1 year at +4°C

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 (10 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 % Bromophenol Blue and 0.01% Methyl Red, will indicate the migration progress. Bromophenol 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
β-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, i.e. decreases as temperature increases (-0.005 .. -0.03 pH units per °C).

intensities of bands may vary

Conditions of IEF:

SERVALYT® PRECOTES® 3-10, 150 µm, cat.no. 42967

pre-settings: 2000 V, 7 mA, 12 W, Temperature: 5°C

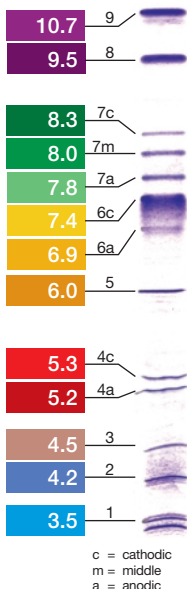
Start: 200 V, 7 mA, 2 W

Stop: 2000 V, 4 mA, 8 W

Duration: 3500 Vh, 175 min.

Electrode solutions: Anode Fluid 3 (cat.no. 42984), Cathode Fluid 10 (cat.no. 42986)

SERVALYT® PRECOTES® 3-10 pI



Schematic representation of marker bands in various pH fractions

