Elite Pre-stained Protein Ladder User Guide

The ELITE Pre-stained Protein Ladder is a three-colour protein standard with 10 pre-stained proteins covering a wide range of molecular weights from 6.5 to 270 kDa. Designed for monitoring protein separation during SDS-PAGE, verifying Western transfer efficiency on membranes and for approximating the size of proteins.

Storage Conditions: 25° for up to 2 weeks 4°C for up to 3 months -20°C for long term storage Avoid repeated freezing and thawing. Do not apply heat or reducing agent. The Elite Pre-stained Protein Ladder is provided ready for use. For Research Use Only. en

P

'n(

tein

Storage Buffer:

62.5 mM Tris- H_3PO_4 (pH 7.5 at 25 °C), 1 mM EDTA, 2% SDS, 10 mM DTT, 1 mM NaN3, 33% glycerol.

Quality Control:

oten

^k P

otei

ote

Under suggested conditions, Elite Pre-stained Protein Ladder resolves 10 major bands in 4-12% Bis-Tris Gel (MES buffer) and after Western blotting on Nitrocellulose membrane.

High-intensity, 3-colour MW determination:

MW – Orange Green Orange	Buffer Conditions	
270 kDa, 52 kDa, 30 kDa	Tris Glycine 4-20%	
240 kDa, 50 kDa, 27 kDa	Bis-Tris 4-12% MES	

- Ultra-clear and expanded MW range (6.5-270 kDa).
- Clear separation for high MW proteins
- Up to 100% electroblot transfer efficiency (Seema Qamar, CIMR, Cambridge University, 2018)

Tris-Glycine 4-20%

270

175

130

95

66

52

37

30

16

6.5

Bis-Tris 4-12% MES buffer



Protein /rk

Calibre Scientific UK, Unit 5A, R-Evolution @ The Advanced Manufacturing Park, Selden Way, Rotherham, S60 5XA Email: info@proteinark.com Telephone: +44 (0) 114 224 2257 Web: www.proteinark.com

Elite Pre-stained Protein Ladder Standard Protocol

Protocol:

- 1. Thaw standard at room temperature
- 2. Vortex to ensure a homogenous solution
- 3. Load the standard on the gel (Refer to recommended volumes below for clear visualisation)

Gel Type	Application		
	Electrophoresis	Western Transfer	
15-well mini-gel	3 µl per loading	2.5 µl per well	
10-well mini-gel	5 µl per loading	2.5 µl per well	

Elite Pre-stained Protein Ladder vs. Novex Sharp Pre-stained Protein Standard (ThermoFisher)

Protocol:

Gel buffer: 4-12% Bis-Tris, MES Western transfer: Stained with Coomassie

- Lane 1: Novex Sharp 5µl
- Lane 2: Novex Sharp 10µl
- Lane 3: Elite Protein Ladder 5µl
- Lane 4: Elite Protein Ladder 10µl

*Qamar S, Cambridge Institute for Medical Research, Cambridge, UK, October 2018.

Bis-Tris 4-12% MES buffer

3

4

240

140

115

80

62

50

31

27

15

6.5

2

1

260

160

110

80

60

50

40

30

20

15

10

Western Transfer



Ordering Information

Name	Pack Size	Product Code
0.5 ml Elite Pre-stained Protein Ladder	2 x 0.25ml	PAL-EPL-500
2.5 ml Elite Pre-stained Protein Ladder	10 x 0.25ml	PAL-EPL-2500

5µl 10µl 5µl 10µl



Calibre Scientific UK, Unit 5A, R-Evolution @ The Advanced Manufacturing Park, Selden Way, Rotherham, S60 5XA Email: info@proteinark.com Telephone: +44 (0) 114 224 2257 Web: www.proteinark.com