



Cat. No. 1711  
4-channel



Cat. No. 1710  
2-channel

## Cascade<sup>®</sup> M and Cascade<sup>®</sup> M-4 Manual Coagulation Analyzers

**Cascade M and Cascade M-4** are manual hemostasis analyzers that are ideal for all routine clotting assays - PTs, aPTTs, thrombins, fibrinogens and factor assays. Operation is simple and economical, with only a 15" x 15" footprint.

**Easy-to-Use Keypad, On-Screen Prompts** – All tests are clearly enumerated on the keypad for fast, easy test selection. Computer prompts conveniently step the user through testing.

**State-of-the-Art Photo Optics** – Independent photo-optic detection sources (two for Cascade M, four for Cascade M-4) read all samples, regardless of turbidity. Samples can be read in duplicate or in single.

**On-board Quality Control** – Cascade M and M-4 store standard curves, calculate patient results, INRs and aPTT ratios as well as calculating mean, SD and CV, plus plot and print Levy-Jennings QC charts.



# Helena Hemostasis

## Prothrombin Time

Helena Thromboplastins offer a range of ISI values to provide a reagent that's just right for your lab. Reagents are prepared from rabbit brain tissue, and are suitable for automated, semi-automated and manual applications.



### Thromboplastin-LI

- Ready for use; no mixing required
- Stability of open reagent: 14 days at 2-8°C
- Target ISI value: < 1.5

### Thromboplastin-MI

- Convenient add-a-vial diluent included in kit to eliminate pipetting errors and water problems
- Reconstituted stability: 7 days at 2-6°C
- Target ISI value: 1.6 to 1.8

### Thromboplastin

- Reconstituted stability: 7 days at 2-6°C
- Target ISI value: 2.0 to 2.5

- 5248 Thromboplastin-LI, 250 tests, 10 x 5 mL
- 5249 Thromboplastin-LI, 500 tests, 10 x 10 mL
- 5274 Thromboplastin-MI with Diluent, 125 tests, 5 x 5 mL
- 5271 Thromboplastin-MI with Diluent, 250 tests, 5 x 10 mL
- 5272 Thromboplastin-MI with Diluent, 500 tests, 10 x 10 mL
- 5380 Thromboplastin, 200 tests, 10 x 4 mL
- 5381 Thromboplastin, 500 tests, 10 x 10 mL

## Activated Partial Thromboplastin Time

Helena aPTT reagents are ready-to-use liquids for convenience, high quality for precision, and priced for economy. Multiple kit sizes are available. Reagents are suitable for photo-optical, mechanical and manual (tilt tube) methods.



### aPTT-SA (Soluble Activator)

- Soluble ellagic acid activator
- Optical clarity, a plus for automated systems
- Shorter activation time (~3 minutes vs. 5 minutes)

- 5388 aPTT-SA & CaCl<sub>2</sub>, 250 tests, 5 x 5 mL
- 5389 aPTT-SA & CaCl<sub>2</sub>, 500 tests, 5 x 10 mL
- 5387 aPTT-SA, 1000 tests, 10 x 10 mL
- 5386 0.025 M CaCl<sub>2</sub>, 10 x 10 mL

# Helena Hemostasis

## Thrombin Clotting Time

- Excellent, rapid screening test for qualitative assessment of plasma fibrinogen and interfering substances such as heparin and FDP
- Uses a low concentration of heparin (~3 NIH units/mL) with undiluted plasma
- Sensitive to fibrinogen levels below 70 mg/dL

**5377 Thrombin Time Reagent, 250 tests, 10 x 5 mL**

## Fibrinogen

- Clauss methodology for quantitation of fibrinogen in acquired and congenital disorders
- Uses high thrombin (~100 NIH units/mL) and low fibrinogen (2.0 to 50.0 mg/dL) concentrations so that clotting times are dependent on plasma fibrinogen
- Not significantly effected by heparin concentrations below 0.6 USP units/mL and FDP levels below 100 µg/mL

**5376 Fibrinogen Assay Kit, 100 tests**

Thrombin Reagent 5 x 2 mL,  
Fibrinogen Calibrator 2 x 1 mL,  
Owren's Veronal Buffer 2 x 25 mL

**5374 Thrombin Reagent, 200 tests, 10 x 2 mL**

**5375 Owren's Veronal Buffer, 10 x 25 mL**

**5379 Fibrinogen Calibrator, 10 x 1 mL**

## Factor Deficient Substrates

*Helena offers quality factor deficient substrates with < 1% residual factor activity. All substrates (except Factor II) are prepared from human congenitally deficient donors.*

### Congenital Factor Deficient Substrates

- 5191 Factor V Deficient Substrate, 10 x 1 mL**
- 5192 Factor VII Deficient Substrate, 10 x 1 mL**
- 5193 Factor VIII Deficient Substrate, 10 x 1 mL**
- 5194 Factor IX Deficient Substrate, 10 x 1 mL**
- 5195 Factor X Deficient Substrate, 10 x 1 mL**
- 5196 Factor XI Deficient Substrate, 10 x 1 mL**
- 5197 Factor XII Deficient Substrate, 10 x 1 mL**

### Bovine Factor Deficient Substrate Plasma

- 5190 Factor II Deficient Substrate, 10 x 1 mL**

## Hemostasis Controls and Reference Plasmas

*Our controls and reference plasmas offer a sensible means to monitor accuracy and precision in hemostasis testing.*

### PT, aPTT and Fibrinogen Controls

- Norm-Trol 1 is prepared from lyophilized normal human plasma to provide a normal level control for PT, aPTT, and Fibrinogen assays
- Ab-Trol 2 and Ab-Trol 3 are lyophilized absorbed human plasmas which provide moderately elevated and very elevated, respectively, PT and aPTT controls
- Reconstituted controls: stable 8 hours at 2 to 6°C

### Specialty Assayed Controls and Reference Plasma

- S.A.R.P. is a highly acclaimed reference plasma standardized to WHO and ISTH. It is prepared from a frozen pool of citrated plasma from healthy donors. The pool is buffered and lyophilized to ensure stability of all plasma constituents.
- Our Specialty Assayed Controls are available in two levels: S.A.C.-1 normal and S.A.C.-2 abnormal (<60% of normal)
- S.A.R.P. and S.A.C. are assayed for: PT, aPTT, Fibrinogen, Factors II, V, VII, VIII, IX, X, XI, XII, Protein C, Protein S (free & total), Ristocetin Cofactor, and vWF:Ag



### Quality Assurance Review (QAR)

- We offer QAR, a free computer service for analyzing daily QC data for shifts or trends and establishing mean control values for individual laboratories
- QAR allows you to compare your results to other labs using the same reagents, instruments and controls
- Retrospective peer reports include precision data on the various instrument-reagent systems being used
- Ask to enroll in this free service when placing your order for Norm-Trol 1, Ab-Trol 2 and Ab-Trol 3

**5186 Norm-Trol 1, 10 x 1 mL**

**5187 Ab-Trol 2, 10 x 1 mL**

**5183 Ab-Trol 3, 10 x 1 mL**

**5301 S.A.C.-1 (Normal), 10 x 1 mL**

**5302 S.A.C.-2 (Abnormal), 10 x 1 mL**

**5185 S.A.R.P., 10 x 1 mL**

# Cascade M-4 and Cascade M

Features	Benefits
State of the Art Photo-Optics	Lamps adjust to read any sample regardless of turbidity. Low maintenance.
On-Screen Prompts	Test directions provided on screen for ease of use. CLIA rated moderately complex. Default settings supplied for all clotting assays, yet operator can easily change parameters.
Easy to Use Keypad	Test enumeration for all assays. Directions for changing parameters provided. No hidden keys.
Independent, Dual or Multi Channel Operation Cascade M: 2 channels Cascade M-4: 4 channels	May be used for single or duplicate testing.
On-Board Computerization and QC Package	Stores standard curves, calculates final results, INRs and aPTT ratios. Calculates $\bar{X}$ , SD, CV and plots Levy-Jennings charts. LIS interfaceable (Cascade M-4).
Compact, Lightweight Cascade M: 8"H x 15"W x 13"D; 20 lbs. Cascade M-4: 8 <sup>1</sup> / <sub>2</sub> "H x 14"W x 14"D; 21 lbs.	Small footprint requires little bench space. Lightweight plastic housing makes instrument easy to move and clean.
Fluorescent LCD Display Cascade M: 4-line x 40 Character Cascade M-4: 6-line x 40 Character	Easy to read directions and results display.
4 <sup>1</sup> / <sub>2</sub> " Thermal Printer	Printed results include date, time, INR, average, position for technician and patient identification. Prints graphics for QC and standard curves.
Complete line of Helena reagents and controls	One-stop shopping with no hassles. Make Helena your source for quality reagents and controls for PTs, aPTTs, fibrinogens, thrombin times, factor assays, and more.

## Order Information

Cat. No.	Description
1710	Cascade M (110/220 V) (2-channel analyzer, 4-line screen)
1711	Cascade M-4 (110/220 V) (4-channel analyzer, 6-line screen)
1718	Cascade M/M-4 Cuvettes (5 pkgs of 100)
1720	Printer Paper Replacement Pack for Cascade M/M4 (5 rolls)

**Toll free 800-231-5663**  
**www.helena.com**

