

to interfering compounds such as DNA, Detergents, DTT and Urea

## Wide Dynamic Range

Over 3-orders of lineal dynamic range

Safe to Use

#### Versatile

Suitable for protein digests and pure peptides

### Compatable

with
Mass Spectrometry,
Edman sequencing,
PMF, other assays

Perfect for High Throughput

#### Simple & Protocol

- No heating
- No reduction
- Stable signal

#### Flexible

Can be used with fluorometers, CCD and laser based images. Suitable for microtiter plates, curvettes

Cost Effective Low Background
High signal to noise

Sensitive

Detect as little as 100 ng/mL

**LavaPep™ -** The new approach to peptide quantification

Environmentally Friendly Biodegradable

# Make the switch to LavaPep™ for your protein assays

LavaPep™ is based on a flurophore called epicocconone that provides a fundamentally new approach to peptide quantification.

Epicocconone reacts with lysine arginine and histidine residues resulting in a shift in fluorescence from green to an intense red. (figure 2)

Binding is reversible allowing downstream applications such as Mass Spectrometry, N-terminal Sequencing, HPLC and other assays.

Epricocconone is a natural product, this it is biodegradable, enabling convenient environmentally friendly disposal.

## **Benefits**

- Sensitive, enabling as little as 100 ng/mL peptide to be quantified
- Wide linear dynamic range, over 3 orders of magnitude
- Wide range of convenient assay volumes; 100 μL 3 mL
- Easy, quick and simple protocol, read data within 60 minutes
- Robust to DNA, Detergents, DTT, Urea, etc and is stable for up to 5 hours
- No heating and reduction steps
- Wide range of fluorescent measuring instruments can be used
- Peptides are not precipitated or denatured
- Compatible with downstream applications
- Fully biodegradable, enabling safe, economical disposal

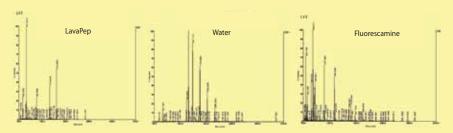
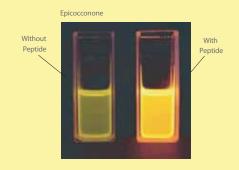
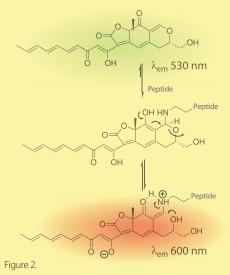


Figure 1. LavaPep does not modify peptides which are suitable for MS analysis immediately after quantification. MALDI mass spectra of peptide generated by trypsin digestion of BSA processed for peptide mass fingerprinting. Note the modification of peptides by fluorescamine.

	Treatment		
	Fluorescamine	LavaPep	Water control
SWISS- PROT	N/A	P02769	P02769
Protein Match	NONE	Albumin Bovine	Albumin Bovine
Mass	N/A	69248	69248
PI	N/A	5.82	5.82
Coverage	N/A	55	38

Table 1. MS coverage and matching of bovine serum albumin with fluorescamine, LavaPep and water.





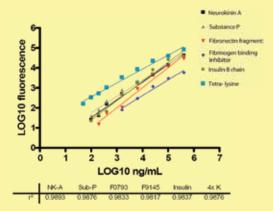


Figure 3. Standard curves for a range of pure peptides.



www.gelcompany.com
Contact us for further details

1. Coghlan, D.R., et al., 2005. Organic Letters 7, 2401-2404 Lava is a registered trademark of Fluorotechnics

