



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

Wide Dynamic
Range

Over 3-orders of linear
dynamic range

Versatile

Suitable for digests
and pure peptides

Safe
to Use

Compatible
with
Mass Spectrometry,
Edman sequencing,
PMF, other assays

Perfect for
High
Throughput

Simple & Protocol

- No heating
- No reduction
- Stable signal

Accurate
quantification
of Peptides from
digestions

Flexible

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

Low Background
High signal to noise

Sensitive

Detect as little as
100 ng/mL

Cost
Effective

Environmentally
Friendly
Biodegradable

LavaPep™ - The new approach
to peptide quantification

Make the switch to LavaPep™ for your protein assays

LavaPep™ is based on a fluorophore 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.

Epicocconone 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

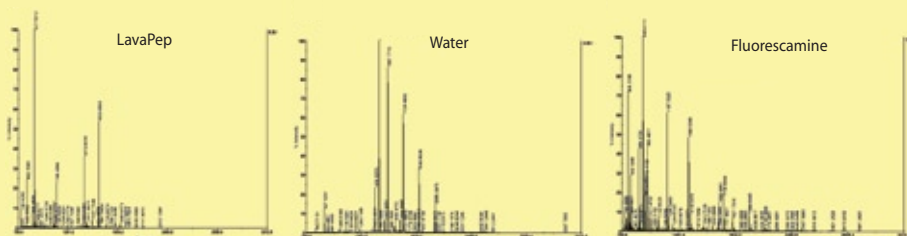


Figure 1. LavaPep does not modify peptides which are suitable for MS analysis immediately after quantification. MALDI mass spectra of peptide generated by trypsin digestion of BSA processed for peptide mass fingerprinting. Note the modification of peptides by fluorescamine.

	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.

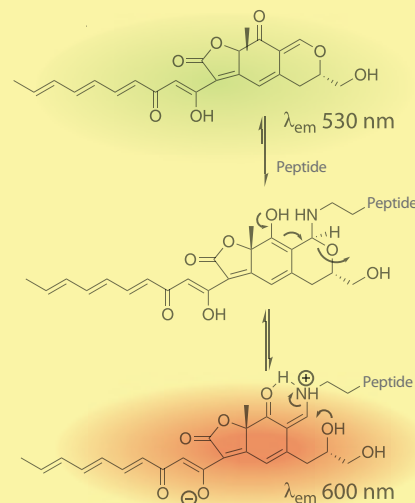
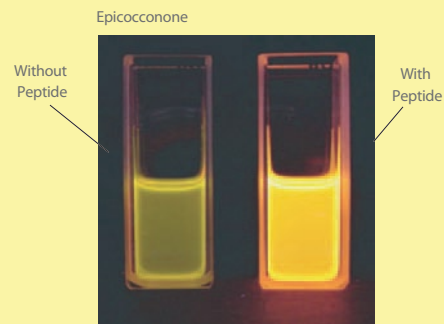


Figure 2.

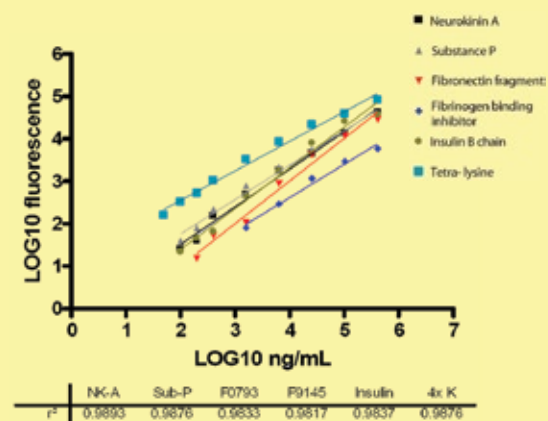
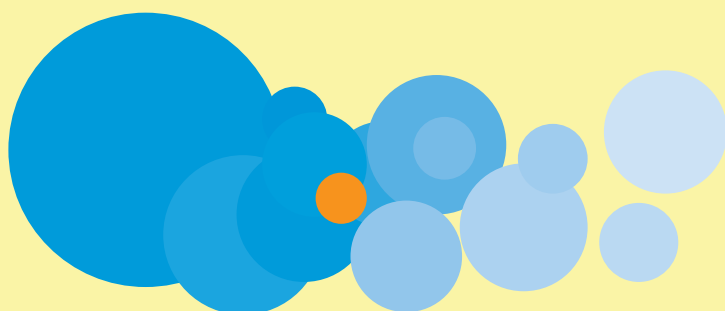


Figure 3. Standard curves for a range of pure peptides.



Simply the
best peptide assay
available

fluorotechnics
naturally fluorescent

www.fluorotechnics.com
Contact us for further details.

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