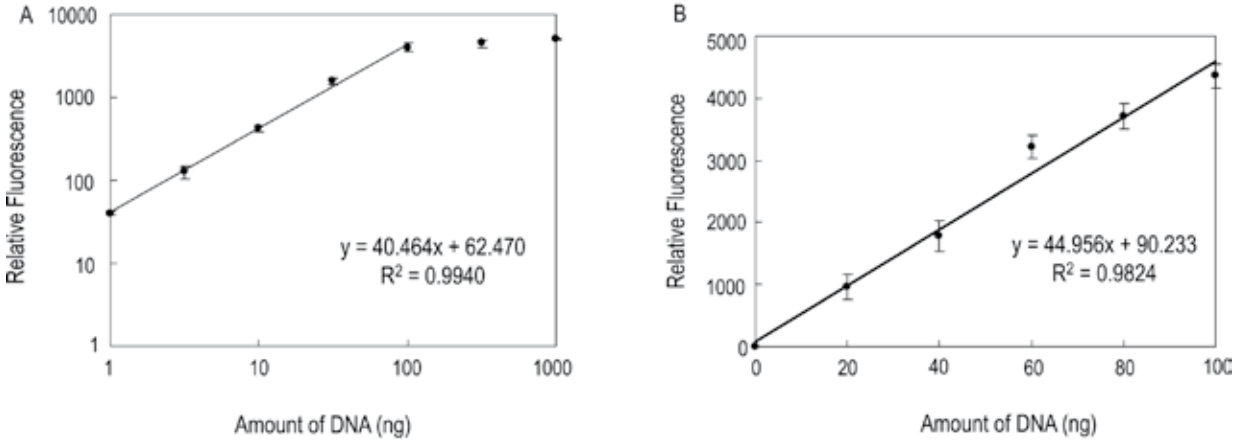



## EvaGreen - DNA quantification in solution

- Linear response on the range of **1–100 ng**
- Sample size : 50 µl
- Standard filter set : $\lambda_{exc.}$ / $\lambda_{em.}$ : **490/520 nm**
- **Requires small amounts of DNA and dye**

The intensity of fluorescence (relative fluorescence units) is proportional to the total amount of DNA per tube rather than the concentration of DNA in the tube.

Wang W. et al. has used the EvaGreen for DNA quantification on 25 µl sample with linear response from 1 ng to 100 ng (Analytical Biochemistry, Volume 356, Issue 2, Pages 303-305 (2006)) : Figure A and B. A strong linear relationship is observed when the amount of DNA is less than 100 ng (Fig. A), and this is very reproducible (Fig. B).



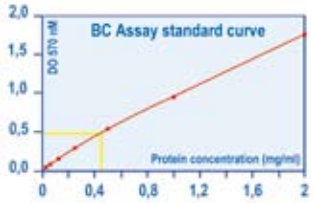
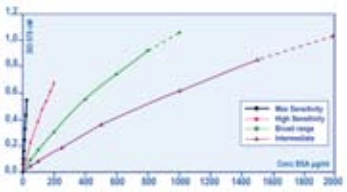
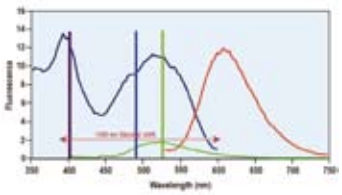

**Relationships between fluorescence intensity and the amount of DNA per tube :** Triplicate samples of _DNA in the range of 1–1000 ng (A) or 0–100 ng, (B) were added to PCR tubes containing 1.25 µl of EvaGreen (20X concentrate), and water was added to make a final volume of 25 µl.

| Description | P/N : | Qty |
|---|---|---|
| EvaGreen 20X in PBS | **BI1790** | 5 x 1 ml (1000 assays) |
| EvaGreen 20000X in DMSO | **CA6770** | 1 ml (200 000 assays) |
| **Related products :** | | |
| DNA from lambda phage, as standard for DNA quantification | **UP947860** | 100 µg |
| Hoechst 33258, for high concentration DNA quantification | **FP-61248A** | 100 mg |
| DNA dosage by UV with only 5 µl sample, using IMAplates | **see description page 72** | |

Other application of the EvaGreen in the BioScience Innovation catalog.




Interchim proposes 3 methods to assay proteins in microplates :

| | **Colorimetric/BCA method :**<br>BC Assay & MicroBC Assay | **Colorimetric/Bradford method :**<br>CooAssays () | **Fluorescent/Epicocconone :**<br>LavaPep method |
|---|---|---|---|
| |  |  |  |
| **Sensitivity :** | 0.5 µg/ml (MicroBC Assay)<br>20 µg/ml (BCA assay) | 1-25 µg/ml (max sens.protocol)<br>50-1500 µg/ml (Broad range protocol) | 50-160 pg/ml peptide, proteins |
| **Linear range :** | 1-250 µg/ml (MicroBC Assay)<br>20-2000 µg/ml (BCA assay) | 1-25 µg/ml (max sens.protocol)<br>50-1500 µg/ml (Broad range protocol) | 100 ng/ml-160 µg/ml |
| **Reading** | 562 nm | 570-610 nm | 405-500/560-610 nm |
| **Comments :** *advantages* | The most reliable method<br>Compatible with most **detergents**, bases, DNA, lipids<br>**Broader linearity**<br>**Lowest variations** between proteins | **Quick** (1-10 min)<br>Compatible with **reducers** | **Ultimate sensitivity and linearity**<br>Peptide dosage<br>Biodegradable<br>Robust, amenable to N-term sequencing, MS and functionnal assays |
| **Comments :** *limitations* | Need 37°C incubation or longer time | Limited compatibility<br>(reducers, acids, some detergents) | Limited compatibility |

| Description | P/N : | Qty |
|---|---|---|
| BC Assay protein determination kit<br>Bicinchoninic acid based method-590nm.<br>Contains : 1L reagent sufficient for 500/5000 tests (tube/µplate), and 10 x 1 ml BSA standard 2 mg/ml | **UP4080A**<br>**UP4080B** | 1 kit-1 L<br>1 kit-250 ml |
| MicroBC Assay protein determination kit<br>Version of BC Assay with sensitivity 0.5 µg/ml.<br>Contains : 1L reagent sufficient for 500/3400 tests, and 10 x 1 ml BSA standard 2 mg/ml | **UP75860A**<br>**UP75860B** | 1 kit-1 L<br>1 kit-50 ml |
| Coo Assay protein determination kit<br>Modified Bradford (Coomassie based method).<br>Contains : 1L reagent sufficient for 500/4000 tests (tube/µplate), and 10 x 1 ml BSA standard 2 mg/ml | **UPF86400**<br>**UPF86401** | 1 kit-1 L<br>1 kit-250 ml |
| LavaPep peptide & proteins assay<br>Epicocconone based method.<br>Contains : Dye concentrate 10X, Buffer concentrate 10X | **CH4191** | 1 Kit<br>(up to 2000 tests) |

Order together the following reagent to render these protein assays compatible with any interfering substance !

Protein Preparation kit
Réf. : R5594A 500 ml



## Biochemistry tests for biologicals samples

Interchim provides a whole range of biochemistry assays for clinical chemistry (Blood, Urine, CerobroSpinal fluids,...) as well as for other samples (food, soil, water...) analysed in agro-alimentary industry or environement study. Here is a short selection of assay kits.

| Description | P/N : | Qty |
|---|---|---|
| Glucose assay<br>Hexokinase/G6PDH based method. Reading at 500 nm. Linear to 400 mg/dL. For serum, plasma or urine. 5 min procedure. | **BD1850** | 1 Kit (120 ml) |
| Creatinine assay<br>Enzymatic method. Reading at 546 nm. Linear to 30 mg/dL. For serum, plasma and urine samples. | **BP9991** | 1 Kit (30 ml) |
| β-Hydroxybutyrate assay<br>Enzymtic method. Reading at 505 nm. Linear to 4.5 nmol/L. For serum or plasma. | **AL2230** | 1 Kit (60 ml) |
| Glucose assay<br>Hexokinase/G6PDH based method. Reading at 340 nm. Linear 1-80µg/ml. For food stuff and bewerage. | **U67120** | 1 Kit (40 tests) |
| Glycerol assay<br>Enzymatic method. Reading at 330/334/365 nm. One component. For food stuff and bewerage. | **R51065A** | 1 Kit (4 x 10 tests) |
| Cholesterol assay<br>Enzymatic CHOD/PAP method. Reading at 546 nm. For food stuff and bewerage. | **R5756A** | 1 Kit (4 x 10 tests) |

Contact us for other analytes in biological samples (Calcium, Bilirubin, HDL, Urea, ... / Maltose, Fructose, Starch, Malate, Lactate,...).