

## **BioCell Protein Carbonyl Kit Performance Information**

Updated: 20/11/00

### **Performance Information**

Our technical support group has provided the following information on the performance of the kit.

#### **Intra-assay precision and accuracy:**

6 wells for each sample

<b>nmol/mg standard</b>	<b>CV</b>	<b>back-calculated concentration</b>	<b>deviation</b>
0.05	4.0%	0.068	+36%
0.1	3.6%	0.114	+14%
0.25	5.0%	0.243	-2.8%
0.5	1.7%	0.507	+1.4%
1.0	2.8%	0.996	-0.4%

#### **lot to lot variation:**

2 batches of protein standards, 3 wells each, then results combined for calculation of CV

<b>nmol/mg</b>	<b>CV</b>
0.05	3.6%
0.25	3.7%
0.5	2.9%
1.0	4.2%

This data shows that there is very little variation between different lots of standards, the main source of lot-to-lot variation. Different lots of reagent will cause extremely minor, if any, variation.

#### **Intra-assay variation for clinical samples (plasma):**

3 wells per sample

<b>nmol/mg result range</b>	<b>Number of samples</b>	<b>Average CV%</b>
<0.1	18	4.6
0.11-0.3	9	2.9
>0.3	12	3.8

### Inter-assay precision:

Quality Control Sample	Medium	High	Low
Number of Assays	6	6	6
Mean	0.201	0.560	0.050
SD	0.016	0.033	0.012
CV	7.7%	5.8%	24.7%

This selection of samples lies within the range of levels commonly found in clinical samples, e.g. plasma. In general, at the low end of the standard curve, a higher variation is expected which decreases as levels increase.

These results have been compiled over 3 months using the new improved formulation and give a realistic impression of the results that can be expected. This assay has been compared with the original colorimetric method; there was a good correlation between results, but the colorimetric assay was found to be less sensitive and giving poorer reproducibility.

### Stability Information

Stability studies have shown that the kit components are stable for 10 days at 20°C thus allowing transport around the world.

Upon arrival and for extended storage we recommend storage at 4°C.

After reconstituting the standards, freezing at -80° C is recommended and stability is retained for at least 12 months with 4 freeze/thaw cycles.

### **Further technical Support**

Any problems please contact our technical support at

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