

BioCell Protein Carbonyl Kit Performance Information

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

nmol/mg standard	CV	back-calculated concentration	deviation
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

nmol/mg	CV
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

nmol/mg result range	Number of samples	Average CV%
<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

support@biocellcorp.co.nz

www.biocellcorp.co.nz