

# Bridging Studies Using Array Bridge CHO HCP ELISA and the Cygnus CHO HCP ELISA kit.

#### INTRODUCTION

An experiment was conducted to determine Host Cell Protein (HCP) concentration in drug substance X, according to Array Bridge CHO HCP ELISA protocol. Two batches of drug substance were analyzed and compared with Cygnus CHO ELISA results. Those samples were diluted to 4 mg/ml for analysis.

#### **METHOD**

The Array Bridge CHO HCP ELISA protocol was followed for HCP quantitation. HCP spike recovery at 10 ng/mg (40 ng of CHO HCP standards spiked in 4 mg/ml drug substance X) was evaluated.

### **RESULTS**

Table 1. Assay Criteria

| Parameter   | Criterion                     | Result | Criterion Met<br>Yes/No |
|---|-------------------------------|--------|-------------------------|
| HCP Standard Curve  | Similar to that in the method | Pass   | Yes                     |
| Standard Curve Correlation Coefficient                    | R <sup>2</sup> ≥0.990         | 0.998  | Yes                     |
| Spike Recovery (10 ng/mg spike) Drug Substance X, batch-1 | 70-130%                       | 98%    | Yes                     |
| Spike Recovery (10 ng/mg spike) Drug Substance X, batch-2 | 70-130%                       | 105%   | Yes                     |

Table 2. Comparison between Array Bridge CHO HCP ELISA and Cygnus CHO HCP ELISA

| Sample ID | Cygnus CHO HCP ELISA | Array Bridge CHO HCP ELISA |
|-----------|----------------------|----------------------------|
|           | ppm (ng/mg)          | ppm (ng/mg)                |
|           | <2                   | 3                          |
| STL-xxxx1 |                      |                            |
|           | <2                   | 3                          |
| STL-xxxx2 |                      |                            |

## CONCLUSION

The analysis meets all system suitability and assay acceptance criteria for the method; the method is suitable for the analysis of HCP in drug substance X.