

January 6, 2017

Client
Example Company
100 Main St
Anytown, USA 19840

Dear Client:

Enclosed are the results from the electrophoretic analysis of your samples received 1/3/17. The percentage of lactoferrin protein by sample weight is given in Table 1. Methods are described on the next page.

PERCENT LACTOFERRIN PROTEIN DETERMINATION

Sample	Measurements	Average	\pm SD
Sample 1	1.10, 1.12, 1.04, 1.07	1.08	0.03
Sample 2	0.70, 0.66, 0.70, 0.69	0.69	0.02

Table 1. Percentage of lactoferrin protein by sample weight. The samples were weighed, diluted, subjected to electrophoresis at two levels, in quadruplicate, and on two gels for a total of eight measurements. Four concentrations of lactoferrin standard were run for generation of the standard curve (SS p.100).

If you have any questions, feel free to give me a call (800) 462-3417.

Sincerely,

Sally Scientist
Biochemist

Methods

Lactoferrin from bovine milk standard (Cat. no. L9507, Lot# SLBL0074V) was purchased from Sigma Chemical Co. (St. Louis, MO). The standard was dissolved in SDS buffer to appropriate concentrations

The samples were prepared as follows: samples were weighed and diluted in sample buffer containing 5.0% sodium dodecyl sulfate (SDS), 10% glycerol, 50 mM dithiothreitol, and 63 mM tris, pH 6.8. After the buffer addition, the samples were heated in a boiling water bath for 5 minutes.

SDS slab gel electrophoresis was carried out according to the method of Laemmli (Laemmli, U.K. *Nature* 227: 680-685, 1970) as described by Burgess-Cassler et. al. (*Clin. Chem.* 35:2297-2304, 1989; second dimension) using 12% acrylamide slab gels (125 mm length X 150 mm width X 0.75 mm thickness) overlaid with a 25 mm stacking gel. Electrophoresis was performed using 15 mAmp/gel for about 3.5hrs. at which time the bromophenol blue front had migrated to the end of the slab gel. The gels were stained with Coomassie blue, destained in 10% acetic acid until a clear background was obtained, then dried between cellophane sheets.

The stained gels were digitized over the appropriate optical density range using a calibrated GE Healthcare Imagescanner III laser densitometer. Standard curves for lactoferrin were constructed and the amount of lactoferrin in the unknown sample was determined from the standard curves using Phoretix 1D v11.2 software with a Windows 10 compatible computer.