



NQAC

Nestlé Quality Assurance Center
Dublin

Technical Datasheet

Analysis Name: Residual Intact Protein by LDS-PAGE

Method Number: LI-08.012 WI

Scope of Application: An in-house LDS-PAGE (lithium dodecyl sulphate - polyacrylamide gel electrophoresis) method for the detection whey-based moderately or partially hydrolysed products.

Description: Samples are resuspended in water (if needed), cleaned by filtration or centrifugation, denatured with lithium dodecyl sulphate (LDS) at 95 °C, reduced by dithiothreitol (DTT), and run on a discontinuous NuPAGE™ 4 % to 12 % Bis-Tris gel using MES buffer near neutral pH. Proteins are concentrated in the stacking gel and separated according to their molecular weight in the separating gel. Following separation, gels are fixed and proteins bands are visualised by silver staining.

Sample Weight Required: 50g

Method Reference: In-house method

Analytical Platform: Electrophoresis Gel

Special Information: Results delivered by this method are expressed as a binary result (detected/not detected). This method can also provide supplementary information related to the relative concentrations of residual intact proteins, but this is only meant to guide discussions and not to be reported as a result.

Analyte Reported	Alias	Unit of Measure	Limit of Quantification	Reproducibility
Protein Bands		Not Detected/Detected	STC <200 mg/kg	N/A