

Determination of Lactoferrin in milk of various species by RP-HPLC

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Short title: **Determination of Lactoferrin in milk by HPLC**

Summary

This Technical Research Communication describes the adjusting and testing of a RP-HPLC method, previously tested for the determination of Lactoferrin in whey, for its applicability in milk samples of various species, namely, ovine, caprine, bovine, donkey and human milk. The advantage of this RP-HPLC method includes speed and convenience, as it does not include extensive pretreatment and separation steps while it provides high accuracy and repeatability. A simple pre-treatment step was added in order to remove fat and proteins of the casein family and the samples were tested. The results varied in terms of elution of the LF peak both between the milk of the different species as well as from the initial application on whey. The peak resolution was satisfactory while quantification of LF was found possible. This new application of the slightly modified method will allow the determination of LF in milk samples of the tested species either for everyday analysis or as a useful qualitative screening for presence or absence of LF.