P.16.- Immuno-quantitative PCR : a new way for detection of resistant prion protein

S. Gofflot[1], B. El Moualij[1], D. Zorzi[1], S. Roels[2], D. Quatpers[3], J. Grassi[4], E. Heinen[1], W. Zorzi[1].

[1] Service d'Histologie Humaine-Centre de Recherche sur les Protéines Prions (CRPP), Université de Liège-CHU, Tour de Pharmacie, Avenue de l'Hôpital 1, B-4000 Liège, Belgium.
[2] VAR-CERVA-CODA, Veterinary and Agrochemical Research Center, Department of Biocontrol - Section of Pathology, National Reference Laboratory for Veterinary TSE (Belgium & Luxemburg), Groeselenberg 99, B - 1180 Brussels, Belgium.
[3] CRPP-Laboratoire ULg BSE, Tour de Pharmacie, Avenue de l'Hôpital 1, B-4000 Liège, Belgium.
[4] CEA, Service de Pharmacologie et d'Immunologie, CEA Saclay, 91191 Gif sur Yvette cedex, France.

I n biology today, methods for detecting organic molecules or infectious agents are diversified and very sensitive. Yet the need to lower detection limits persists, and in many cases quantitative estimates are required. Immuno-PCR is an extremely sensitive detection method combining the specificity of antibody detection and the sensitivity of PCR. We have developed an immuno-quantitative PCR (iqPCR*) exploiting real-time PCR technology in order to improve this immuno-detection method and make it quantitative.

To illustrate the advantages of iqPCR, we have compared it with a conventional ELISA technique in experiments aimed at detecting the cellular and the resistant form of prion protein in bovine brain extract. The iqPCR technique proved to be more sensitive than ELISA, so it could be a technique of choice for the diagnosis of infected animals both at an ante mortem and post mortem stage.

* Patent WO0131056, 2001-05-03: Detection method by PCR, Zorzi Willy (BE); El Moualij Benaïssa (BE); Zorzi Danièle (BE); Heinen Ernst (BE); Melen Laurence (BE).

Keywords

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