

Drug analysis in hair

Context

Within the context of drug analysis in hair, new protocols have been developed to establish the toxicological profile of a patient ; those techniques involve constraints as low volumes and concentrations and absence of cross-contamination.

Before the analysis by HPLC-MS/MS, the samples have to be grinded and reduced in powder form.

See also the publication in *Journal of Analytical Toxicology*, Vol. 29, October 2005

Material

- Precellys®24 equipment
- Precellys® kit 03961MK28 (metal beads)
- 1 cm hair segments



Protocol / Parameters

1. add the samples in the tubes
2. load the platform up to 24 tubes and close the cover
3. set up the parameters :
 - time running : 50 sec
 - speed : 6500 rpm
 - number of cycles : 2
 - break between cycles : 15s
4. press start : run

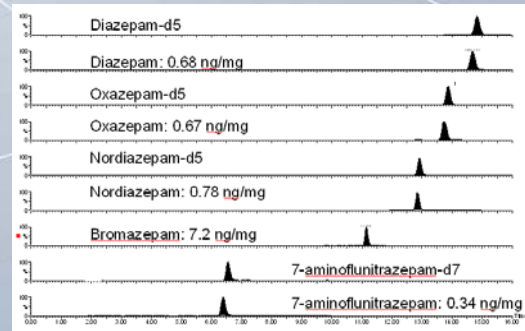


Results in collaboration with NICC

(National Institute of criminology and criminalistic)

Analysis of an authentic hair sample by HPLC-MS/MS :

- 1- decontamination (dichloromethane)
- 2- grinding (Precellys 24)
- 3- incubation (methanol)
- 4- centrifugation
- 5- evaporation
- 6- filtration
- 7- analysis by HPLC-MS/MS



NICC, Belgium, January 2005

For more details to adapt your own protocol, please contact us at precellys@bertin.fr

See also www.precellys.fr