



Drug extraction from whole iris-ciliary body pork PharmOptima, Portage MI, USA

CONTEXT

PharmOptima focuses on **in vivo and in vitro DM&PK and Discovery Services**, providing IND & NDA-enabling research protocols. High quality DM&PK and Ocular PK research are a part of the laboratory's daily activities.

PharmOptima, experienced in ophthalmology studies, currently uses Precellys to homogenize a variety of ocular tissues as **cornea, conjunctiva, lens, iris-ciliary body, trabecular meshwork, sclera, retina, choroid, optic nerve**. In this study, Minilys has been compared to current method (Precellys) to homogenize whole iris-ciliary body from pork.

MATERIAL

- Minilys vs Precellys Dual homogenizer
- Precellys kit ceramic beads 7mL vial (réf.0904-01) +2 beads (Réf.03961-1-106).
- Sample: Thawed whole iris-ciliary body pork (~0.7 g) into 7mL vial.
- Buffer: 2 volumes of sodium chloride solution.

PROTOCOL

- Minilys & Precellys: 5000 rpm, 4x30sec (15sec break).
- Analysis: liquid-liquid extraction; LC-MS/MS system.

RESULTS

The analyte levels are equivalent. No difference involving the both homogenizer is detectable (See Figure 1).

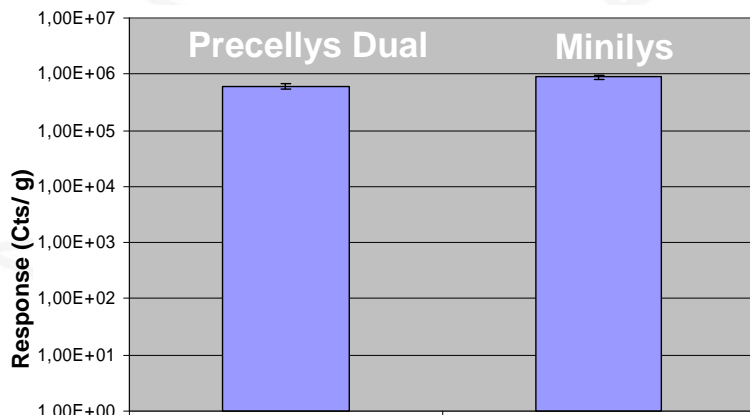
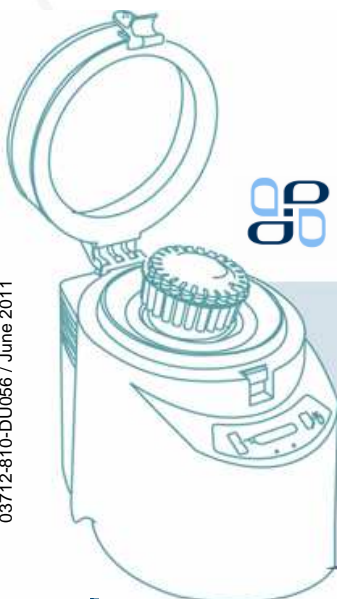
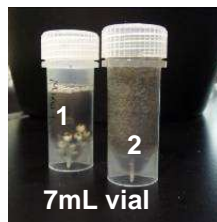


Figure 1: LC-MS/MS analysis from Precellys Dual and Minilys sample.



CONCLUSION

Precellys Dual and Minilys are suitable and reliable systems to extract Drug from ocular tissues for DM&PK testing thanks grinding whole organs as iris-ciliary body pork with a fast process, cross-contamination free, high reproducibility and comparable drug levels extracted.

Minilys homogenizer is a real alternative for standardization of the sample preparation for laboratories with a low or medium throughput of sample.

For more details, please contact precellys@bertin.fr

