



## Enzymatic Dosage from Rat Heart

Lab of Pharmacology - U769 INSERM,  
Chatenay Malabry

### CONTEXT

Inserm Unit 769 aims at understanding how cardiac cells are functioning in normal or pathological states. Various studies are performed to estimate the metabolic phenotype of the rat heart by enzymatic dosage.

### RESULTS

Evaluation of five specific enzymatic activities using a standard enzymatic dosage for two sample preparations methods:

- CK: Creatine Kinase
- AK: Adenylate Kinase
- LDH: Lactate Deshydrogenase
- CS: Citrate Synthase
- COX: Cytochrome C Oxydase

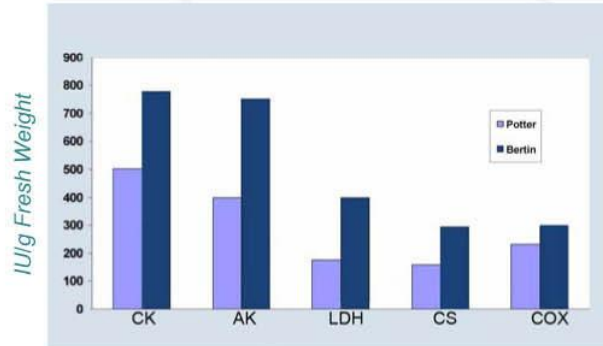
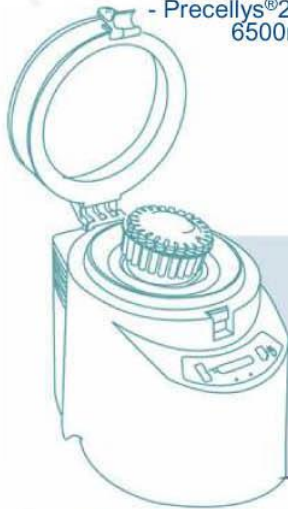
The five specific enzymatic activities are measurable with samples homogenized with the Precellys and the standard Potter lysis

### MATERIAL

- Precellys®24
- Precellys® kit CK14 (small ceramic beads)
- Sample : rat heart (40mg)
- Buffer : HEPES 5mM, EGTA 1mM, Triton 1%, DTT 1mMm pH 8.7(250µl)

### PROTOCOL

- Precellys®24 parameters:  
6500rpm, 2x8 sec., 8 sec. break



Enzymatic Activity Comparison



Inserm  
Signalisation et  
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### CONCLUSION

The Precellys®24 preserves the protein enzymatic activity. The Precellys®24 also saved time compared with standard lysis protocol (Potter lysis) because of its high sample capacity and efficiency

For more details, please contact  
precellys@bertin.fr or visit our website

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<http://www.technosaurus.co.jp>

- 東京  
〒162-0805 東京都新宿区矢来町 113 番地 TEL(03)3235-0661(代) FAX(03)3235-0669
- 大阪  
〒532-0005 大阪市淀川区三国本町2丁目12番4号 TEL(06)6396-0501(代) FAX(06)6395-2588
- 福岡  
〒812-0054 福岡市東区馬出 1 丁目 2 番 23 号 TEL(092)631-1012(代) FAX(092)641-1285

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