



## DNA EXTRACTION FROM RICE GRAIN

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### / CONTEXT

Rice is a key element of the Korean food. Due to Korean regulations, the rice species need to be defined and evaluated. Therefore, DNA qualification and classification are essential. In this study, a rice grain specie is identified using **Precellys®24** vs. mortar

### / MATERIALS

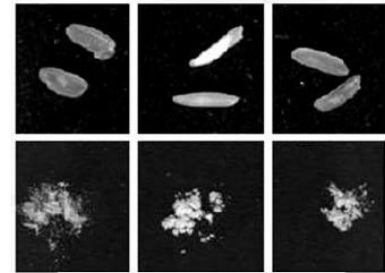
- **Precellys® 24 or Precellys® Evolution**
- Precellys® Lysing kit: MK28-R (ref. P000917-LYSK0-A.0)
- Sample : 1 grain rice
- Samples are treated in a dry manner, without buffer

### / PROTOCOL

- **Precellys®24** parameters: 2 x 30sec with a 20s break at 6000rpm
- Alternately on **Precellys® Evolution** : 3 x 20 sec with a 15sec break at 7500rpm

### / RESULTS

Grinding efficiency: Rice grains of 3 species were grinded into fine powder following the protocol described. DNA analysis: Rice grains (*Oryza sativa* L.) were grinded by **Precellys®24** and a mortar. DNA was extracted and loaded directly onto an agarose gel after PCR amplification. Both **Precellys®24** and mortar are efficient to extract a good quality of DNA. The DNA quantity from rice grains grinded by **Precellys®24** (P1, P2,P3 and P4) are similar to the result with a mortar (M1, M2, M3 and M4).



**Precellys®24** reduces into powder any species of rice grain in 1 minute.



**Precellys®24** gives a faster, easier and more consistent sample preparation with results as efficient as mortar.



Rice (*Oryza sativa* L.).

### / CUSTOMER



### / CONCLUSION

Every rice species on Korean market must be classified via DNA analysis. We compared use of **Precellys®24** vs. mortar and obtained similar PCR results with **Precellys®24**. However, it takes lots of time and labor work with mortar preparation (1 prep in 10 minutes). We are satisfied with the results of **Precellys®24** in terms of reproducibility, time and labor saving (up to 24 preps per minute).



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【米粒からの DNA の抽出】 Precellys-APS-1910-10