

Here at Microzone we recently tested our *micro***LYSIS**[®] and *micro***LYSIS**[®]-PLUS products against the leading competitors.

The test was carried out on the following cell types:

1. Human Primary Fibroblast
2. Human Buffy Coat
3. Human Sperm
4. Soya Flour
5. Arabidopsis Seedling

We lysed the cells using *micro***LYSIS**[®], *micro***LYSIS**[®]-PLUS, two of our competitors' lysing agents and water, following the profiles opposite.

We then amplified the DNA using **MegaMix-Royal**



Lysis Profile 1:

- Step 1: 65°C for 5 mins
- Step 2: 96°C for 2 mins
- Step 3: 65°C for 4 mins
- Step 4: 96°C for 1 mins
- Step 5: 65°C for 1 mins
- Step 6: 96°C for 30 secs
- Step 7: 20°C hold

Lysis Profile 2:

- Step 1: 65°C for 15 mins
- Step 2: 96°C for 2 mins
- Step 3: 65°C for 4 mins
- Step 4: 96°C for 1 mins
- Step 5: 65°C for 1 mins
- Step 6: 96°C for 30 secs
- Step 7: 20°C hold

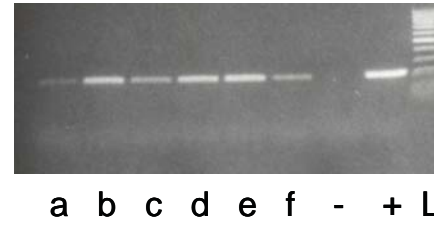
Lysis Profile 3:

- Step 1: 65°C for 30 secs
- Step 2: 8°C for 30 secs
- Step 3: 65°C for 90 secs
- Step 4: 97°C for 180 secs
- Step 5: 8°C for 60 secs
- Step 6: 65°C for 180 secs
- Step 7: 97°C for 60 secs
- Step 8: 65°C for 60 secs
- Step 9: 80°C hold

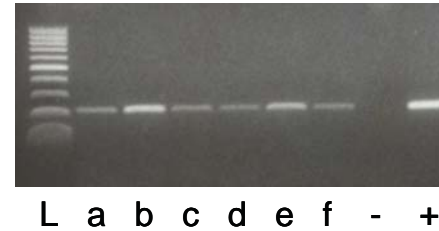
Lysis Profile 4:

- Step 1: 75°C for 5 mins
- Step 2: 95°C for 2 mins
- Step 3: 20°C hold

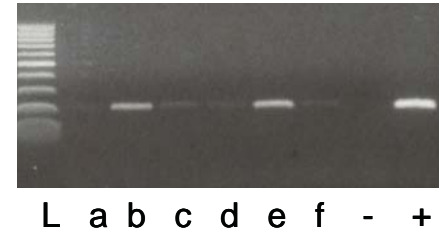
1. Human primary fibroblast (Easy to lyse)



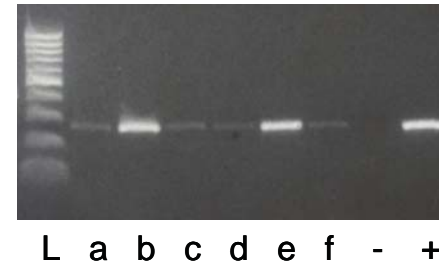
2. Human buffy coat (Easy to lyse)



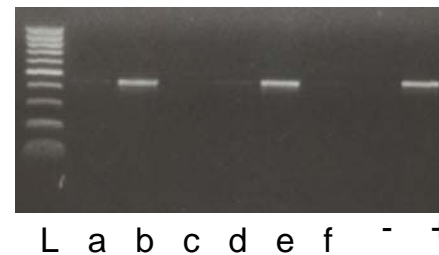
3. Human sperm (Difficult to lyse)



4. Soya flour (Difficult to lyse)



5. Arabidopsis seedling (Difficult to lyse)



Key:

- L = 100 bp ladder
- a = *micro***LYSIS** (Profile 1)
- b = *micro***LYSIS**[®]-PLUS (Profile 2)
- c = Competitor 1 (Profile 3)
- d = Competitor 2 (Profile 3)
- e = *micro***LYSIS**[®]-PLUS (Profile 4)
- f = Water (Profile 4)
- = Negative control
- + = Positive control

The results are shown in the gel pictures to the left.

As you can see all products worked well on the Human Primary Fibroblast and Human Buffy Coat, both of which are easy to lyse. However, it's clear that the only lysing agent to work consistently well on all types of cells is the *micro***LYSIS**[®]-PLUS.

*micro***LYSIS**[®]-PLUS is available with **MegaMix-Royal** as part of the **LYSE 'N EASY**[®] kit or separately.

Please see our website or contact us for more details:

www.microzone.co.uk
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