

Test Report

on long-term room temperature storage of MagBind Particles

1. Experiment of DNA marker recover

Experimental purpose: To verify whether different batches of MagBind Particles placed at room temperature for one year, two years, or three years affect the extraction.

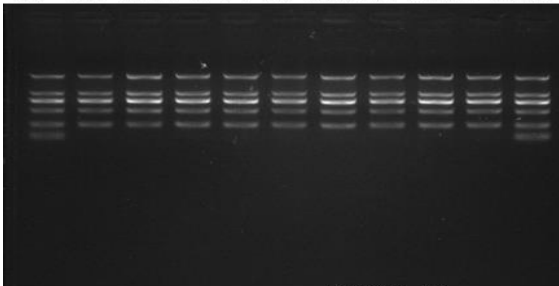
Experimental steps: Take 10 μ l DL2000 marker in a 1.5ml centrifuge tube, add 200 μ l bovine plasma, 20 μ l PK+400 μ l Buffer MLB, mix by vortex, add different batches of MagBind Particles, vortex for 30 seconds, place at room temperature for 5-8 minutes (during which reverse several times), absorb on the magnetic rack, discard the liquid, wash by 500 μ l MW1 once, wash by 600 μ l MW2 twice, dry in air for 10 minutes, elute by 20 μ l enzyme free water. Take 10 μ l elute solution and analyze by electrophoresis.

No.1: Three years storage (2016 batch)	No.2: Two years storage (2017 batch)	No.3~5 One Year storage (2018 batch)		
MagBind -EL280100	MagBind-FG100102	MagBind-GH060100	MagBind -GJ090200	MagBind -GH060100
No.7~9, (2019 batch, the same month of the experiment)			No.6, One Year storage (2018 batch)	
MagBind -HD020200	MagBind-HD260200	MagBind -HE280200	MagBind -GH060200	

Experiment data:

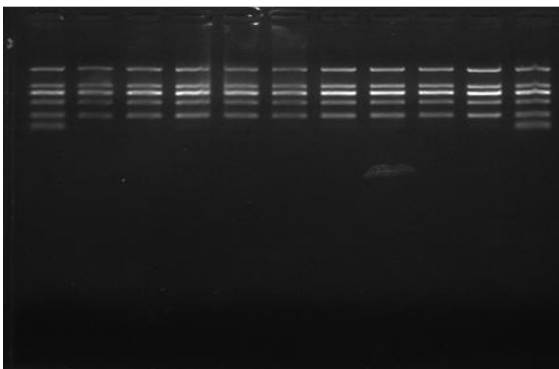
MagBind Partice长期放置实验

|参照||2016|2017|2018||2019|参照|
|60%|1号||2号|3号|4号|5号||6号||7号||8号||9号||80%|



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Experiment Result:

No.9 magnetic beads have the most magnetic beads. No.1 magnetic beads have the least magnetic beads. No.1, 4, 5, 8 magnetic beads have a slower speed of magnetic adsorption, No.2, 3, 1, 4, 5 magnetic beads have a yellowish brown color, No.6, 8, 9 magnetic beads have a yellowish black color. From the electrophoresis chart, it can be seen that **MagBind Particles that store at room temperature for three years, two years, and one year do not affect the recovery rate of marker.** Except No.1 and No.5 are slightly lower than 80%, the recovery rate of other MagBind Particles are basically reach 80%.

2. Hepatitis B Experiment

Experimental purpose: To verify whether different batches of MagBind Particles stored at room temperature for one year, two years and three years affect the extraction of hepatitis B virus.

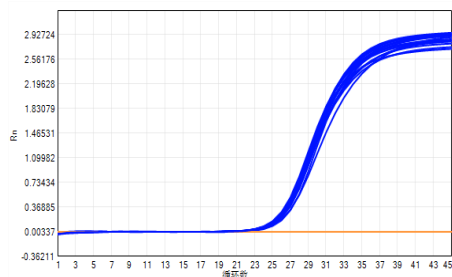
96 well plate adding sequence and operation parameters:

1st hole	1 μ l carrier RNA + 20 μ l PK + 200 μ l Plasma containing hepatitis B virus + 400 μ l MLB + 30 μ l Different batches MagBind Particles
2nd hole	500 μ l MW1
3rd hole	500 μ l MW2
4th hole	500 μ l MW2
5th hole	
6th hole	100 μ l Nuclease Free Water

Step	Well	Name	Wait (min)	Mix (min)	Magnet Times	Volume (μ l)	Temp. situation	Temp.
1	1	Bind	0	8	3	600	Close	0
2	2	W1	0	1	1	500	Close	0
3	3	W1	0	1	1	500	Close	0
4	4	W2	0	1	1	500	Close	0
6	6	Dry	8	0	0	100	Close	0
7	6	Elute	0	10	3	100	Close	0
8	4	Remove	0	1	0	500	Close	0

Fluorescence quantitative system: 7.5 μ l enzyme catalysis solution+7.5 μ l Product

Experiment Data:



Three years storage (2016 batch)		Two years storage (2017 batch)		One Year storage (2018 batch)					
MagBind -EL280100		MagBind -FG100102		MagBind -GH060100		MagBind -GJ090200		MagBind -GH060100	
25.39	25.12	24.71	24.82	25.01	25.02	24.76	25.01	24.97	25.24
(2019 batch, the same month of the experiment)						One Year storage (2018 batch)			
MagBind -HD020200		MagBind -HD260200		MagBind -HE280200		MagBind -GH060200			
24.76	24.83	24.51	24.72	24.64	25.02	24.98		25.01	

Experiment Result: The magnetic beads have almost no residue, and the eluent is clear.

Conclusion: Compared with the new batch, the CT values of MagBind Particles that store at room temperature for three years, two years, and one year in the recovery of hepatitis B were between 24.50 and 25.39, with an error of about 0.5ct. **MagBind Particles stored at room temperature for three years, two years, and one year have no effect on the experiment.**