Biospin Whole Blood Total RNA Purification Kit

Product Introduction

The Biospin Whole Blood Total RNA Purification Kit is designed for extracting and purifying high-quality RNA from both frozen and fresh whole blood samples. This kit utilizes a specially formulated lysis buffer to release RNA from the blood samples. The RNA is then selectively bound to the purification column with the action of ethanol. Through two washing steps, impurities are removed, and finally, RNA is eluted and collected from the purification column with the elution buffer. The purified RNA product from this kit can be directly used in downstream experiments such as Northern Blot, RT-PCR/Real Time, RT-PCR, in vitro translation, etc.

Specification

Parameters	Description
Sample	Frozen Blood and Fresh Whole Blood Samples
Method	Spin Columns
Purity	OD 260/280: 1.7-2.2
Storage Condition	The lysis buffer is stored at 2°C to 8°C, while other kit components are stored at 2°C to 30°C, with a expiration date of 12 months

Characteristic

- **Strong Applicability:** Suitable for various blood types, including fresh whole blood and frozen blood.
- **High Safety:** No need for toxic reagents like phenol or chloroform.

Application Cases

Case 1

The experiment used the Biospin Whole Blood Total RNA Purification Kit with product number BSC114 and competitor (specifically for frozen blood extraction) for comparison in extracting frozen whole blood. Concentration was measured using Nanodrop, and the results were determined through agarose gel electrophoresis, as shown in Table 1 and Figure 1 below:

		BSC114			Competitor		
	Sample ID	Nucleic Acid	260/280	260/230	Nucleic Acid	260/280	260/230
1	Sample 1	77.20	2.04	1.98	72.30	1.93	1.21
2	Sample 2	84.80	2.01	1.58	81.80	2.07	1.44
3	Sample 3	114.6	2.00	1.59	87.60	2.08	1.70
4	Sample 4	56.00	1.99	1.72	77.40	1.96	1.03
5	Sample 5	97.40	2.04	1.85	109.4	2.10	1.87

Table 1: Comparison of Nanodrop Measurements

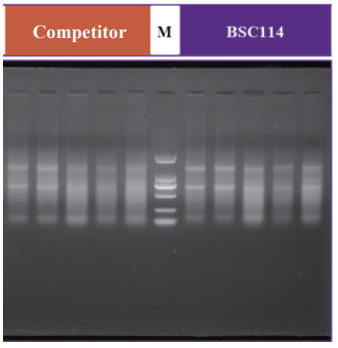

Figure 1: Gel Electrophoresis Comparison

Conclusion: The results indicate that the Biospin Whole Blood Total RNA Purification Kit with product number BSC114 is consistent with competitor.

Case 2

The experiment compared the Biospin Whole Blood Total RNA Purification Kit with product number BSC114 to competitor for the simultaneous extraction of fresh-frozen whole blood. After freeze-thawing and extraction, the concentration was measured using Nanodrop, and the results were determined through agarose gel electrophoresis, as shown in Table 2 and Figure 2 below:

	BSC114				Competitor				
Sample ID	Nanodrop (ng/μl)	260/280	260/230	Gel Electrophoresis Bands	Nanodrop (ng/μl)	260/280	260/230	260/230	Gel Electrophoresis Bands
1	53.8	2.1	1.86	1	56	2.1	1.67	1.67	4
2	40.6	2.12	1.82	2	40.9	2.04	1.32	1.32	5
3	60.9	2.07	1.66	3	78.4	1.92	1.04	1.04	6

Table 2: Comparison of Nanodrop Measurements

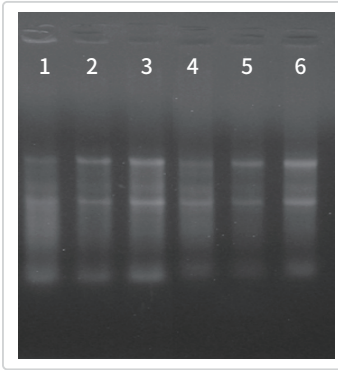

Figure 2: Gel Electrophoresis Comparison

Conclusion: The results indicate that the Biospin Whole Blood Total RNA Purification Kit with product number BSC114 is consistent with competitor.

Ordering Information

Product Name	Cat. No.	Package
Biospin Whole Blood Total RNA Purification Kit	BSC114S1	50T
	BSC114M1	100T

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