

Automated Total RNA Extraction from Leukocyte

Protocol

Pellet of leukocytes in a 2 ml micro tube^{*1}, after erythrocytes lysis
(Maximum number of leukocytes is 1.5×10^7)

↓
Loose pellet by tapping a tube

↓ ← LRB containing with TCEP^{*2} : 520 μl

Vortex (maximum speed) : 30 sec

Flash spin down

↓ ← >99% ethanol : 250 μl

Vortex (maximum speed) : 5 min

Flash spin down

↓
Set into the device
Protocol: RNA BLOOD

*Please refer to Quick Start Guide or operation manual
to know how to set sample tube.



1. Apply lysate into cartridge
2. Pressurizing
3. Wash by Wash Buffer (WRB)
4. DNase treatment^{*3}
5. Wash 2 times by Wash Buffer (WRB)
6. Add selected volume of Elution buffer and elute genomic DNA into collection tube.

total RNA
(Elution volume : 50 μl)

*1 Following microtube are recommended.
#BM4020 (BM instrument co., ltd)
#72.695.700,
#72.695.500S (SARSTEDT)

*2 Add 20 μl of TCEP per 1 ml of LRB.

Recommended products:
FUJIFILM Wako Pure Chemical Corporation
Product name: 0.5mol/L TCEP Solution
REF: 207-20151

*3. Recommended DNase:
Promega
RQ1 RNase-Free DNase
REF : M6101

Results

Total RNA was isolated from Leukocyte (approx. 1×10^7 cells) by QuickGene-Auto12S

The yield of total RNA

Sample ID	#1	#2	#3	Average
Yield (μg)	5.2	4.7	4.6	4.8

Protein contamination A260/280

Sample ID	#1	#2	#3	Average
A260/280	2.13	2.13	2.11	2.12

RNA Quality : RIN

Sample ID	#1	#2	#3	Average
RIN	9.7	9.7	9.8	9.7