
ACK Lysing Buffer

Catalog #:	118-156-721	4 x 100mL
	118-156-721EA	100mL
	118-156-101	500mL
	118-156-101CS	10 x 500mL
Store at:	15°C to 30°C	
Shipped at:	ambient temperature	

Description

Quality Biological's (QBI) ACK Lysing Buffer is prepared from ACS Grade Ammonium chloride (NH₄Cl), potassium bicarbonate (KHCO₃), and molecular biology grade EDTA (ethylenediaminetetraacetic acid) disodium salt using Quality Biological's Cell Culture Grade Water. The final product is filtered through a 0.1 µm filter.

"ACK" is an abbreviation for "Ammonium-Chloride-Potassium(K) Chloride".

Applications

ACK Lysing Buffer is used to lyse erythrocytes found in:

- *Whole Blood*
- *Buffy Coats*
- *Bone Marrow*

Directions

The following is a protocol which can be used to extract DNA from human blood⁴:

1. To 10mL of blood containing 1.1mL of 3.8% (w/v) sodium citrate, add 20mL of ACK Lysing Buffer.
2. With occasional gentle shaking, allow the samples to sit on ice for 10 minutes.
3. Centrifuge the samples for 10 minutes at 2,000 rpm.
4. Discard the supernatant.
5. Re-suspend the pellet in 10mL of ACK Lysing Buffer.
6. Allow the samples to sit on ice for 5 minutes.
7. Centrifuge the samples for 10 minutes at 2,000 rpm.
8. Discard the supernatant.
9. Resuspend in 1X PBS, pH 7.4 (QBI Item # 114-058-101 or equivalent).

Quality Control

General

The quality of a product is a combination of careful selection of raw materials, proper manufacturing procedures, and diligent monitoring of each step.

Quality Control is used to determine whether each step in the manufacturing process has been properly carried out and the finished product meets or exceeds the standards established for it.

Product Specific Testing

ACK Lysing Buffer is routinely tested to verify it meets product specifications for the following parameters:

- pH
- Osmolality
- Microbiological Testing

The test results of individual lots of ACK Lysing Buffer are available on the QBI website.

All products sold by Quality Biological, Inc. are intended for research use only. This product has not been approved for diagnostic or IVD use.

References

1. Sambrook, J., Fritsch, E.F. & Maniatis, T. (1989) *Molecular Cloning, a Laboratory Manual, 2nd Edition.*, Cold Spring Harbor Press
2. Ausubel, F.M. et al., eds. (1993) *Current Protocols in Molecular Biology*. Green Publishing Associates, Inc., in association with John Wiley & Sons, Inc.
3. Davis, L.G. Dibner, M.D. & Battey, J.F. (1986) *Basic Methods in Molecular Biology*. Elsevier Science Publishing Company, Inc.
4. Berger, S.L., & Kimmel, A.R. (1987) *Guide to Molecular Cloning Techniques*, Academic Press.

Related Products

Sodium Dodecyl Sulfate 20% (w/v) (20% SDS)

Catalog #	351-066-721	4 x 100mL
	351-066-721EA	100mL
	351-066-101	500mL

EDTA 0.5M, pH 8.0

Catalog #	351-027-721	4 x 100mL
	351-027-721EA	100mL
	351-027-101	500mL

Sodium Chloride 5M

Catalog #	351-036-721	4 x 100mL
	351-036-721ES	100mL
	351-036-101	500mL
	351-036-491	4 Liters
	351-036-151	10 Liters

Cell Culture Grade Water, Ultra Pure

Catalog #	118-162-101	500mL
	118-162-101CS	10 x 500mL
	118-162-131	1000mL
	118-162-131CS	10 x 1000mL
	118-162-151	10 Liters
	118-162-161	20 Liters

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