

Jan 29, 2024

Version 1

TET buffer V.1

DOI

<https://dx.doi.org/10.17504/protocols.io.3byl4qy8ovo5/v1>

Sarah Nagel¹, Anna Schmidt¹, Matthias Meyer¹

¹Max Planck Institute for Evolutionary Anthropology

MPI EVA Ancient DNA C...



Sarah Nagel

Max Planck Institute for Evolutionary Anthropology

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.3byl4qy8ovo5/v1>

Document Citation: Sarah Nagel, Anna Schmidt, Matthias Meyer 2024. TET buffer . **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.3byl4qy8ovo5/v1>

License: This is an open access document distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Created: January 18, 2024

Last Modified: April 10, 2024

Document Integer ID: 93741

Keywords: tet buffer, ancient dna core unit of the mpi, ancient dna core unit, various steps of sample preparation, sample preparation, mm tri, hcl

Funders Acknowledgements:

Max Planck Society

Abstract

TET buffer (10 mM Tris-HCl, 1 mM EDTA, 0.05% Tween-20, pH 8.0) is used in various steps of sample preparation by the Ancient DNA Core Unit of the MPI-EVA.

Note

This protocol describes the preparation of 500 ml buffer.

Materials

	Reagents/consumables	Supplier	Catalogue number
	Reagents		
	Water	Sigma Aldrich/Merck	1153332500
	1 M Tris-HCl, pH 8.0	AppliChem	A4577,1000
	0.5 M EDTA, pH 8.0	AppliChem	A4892,1000
	Tween-20	Thermo Fisher Scientific	11417160
	Consumables		
	Square media bottle 500 ml	VWR	391-0630
	50 ml serological pipette	Corning BV	357550
	5 ml serological pipette	Corning BV	357543

Equipment

- Automated pipetting aid for glass pipette

Protocol

1. Prepare the buffer in a 500 ml square media bottle by adding the following reagents. Use the glass pipette for transfer of large volumes (> 1 ml). Mix reagents by shaking the bottle.

	Reagent	Volume	Final concentration in reaction
	Water	494 ml	
	0.5 M EDTA, pH 8.0	1 ml	1 mM
	1 M Tris-HCl, pH 8.0	5 ml	10 mM

	Reagent	Volume	Final concentration in reaction
	100% Tween-20	250 μ l	0.05%
	<i>Sum</i>	<i>500 ml</i>	

Note

[Note]

It is also acceptable to use the scale of the bottle to fill up to 400 ml with water, then adding the remaining ~94 ml using the glass pipette.

2. Review the protocol in which the buffer is used to determine whether the buffer should be decontaminated using UV treatment. Instructions for UV-decontamination are provided in the Appendix.

Note

[Labeling]

Label the bottle with the buffer name, batch ID, date and the initials of the person who prepared the buffer.

Attention: Every single bottle prepared at the same day gets a new batch ID. Name the batches with Roman numerals (e.g. batch I, batch II, etc.)

3. Store the buffer at room temperature until used. Shelf life is at least one year from preparation.

Note

[Documentation]

Note the lot numbers, date and initials written on the reagents used for buffer preparation in Labfolder (orange fields).

Appendix



Document

NAME

UV decontamination of materials

CREATED BY

Elena Essel

Preview

Document

NAME

UV decontamination of reagents/buffers

CREATED BY

Elena Essel

Preview