

Centers for Disease Control and
Prevention (CDC)

National Center for Environmental Health
(NCEH)

Division of Laboratory Sciences (DLS)

**NEWBORN SCREENING AND
MOLECULAR BIOLOGY BRANCH
(NSMBB)**

**NEWBORN SCREENING QUALITY
ASSURANCE PROGRAM (NSQAP)
PORTAL**

TRECPT USER GUIDE

September 2023

Table of Contents

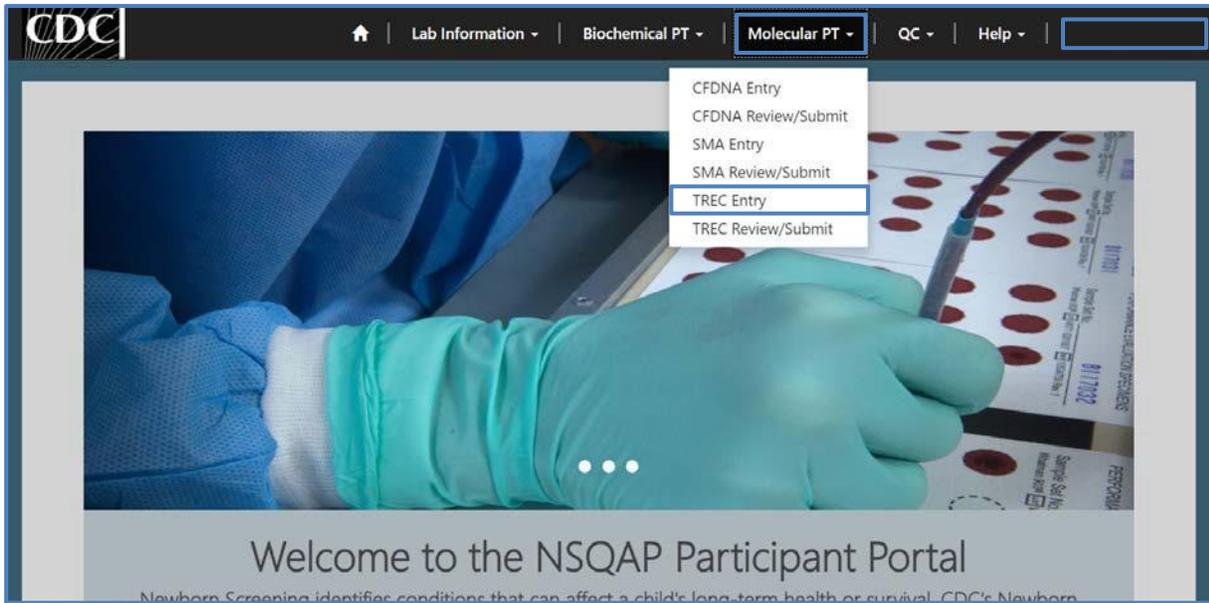
1. TRECPT Program Entry Page	2
1.1 Navigation	2
1.2 Materials & Method Information	4
1.3 Results Entry	14
1.4 Save	15
2. TRECPT Review & Submit Page	16
2.1 Navigation	16
2.2 Review	17
2.3 Submit	19
2.4 Save Data – Pdf Format	21

1. TRECPT Program Entry Page

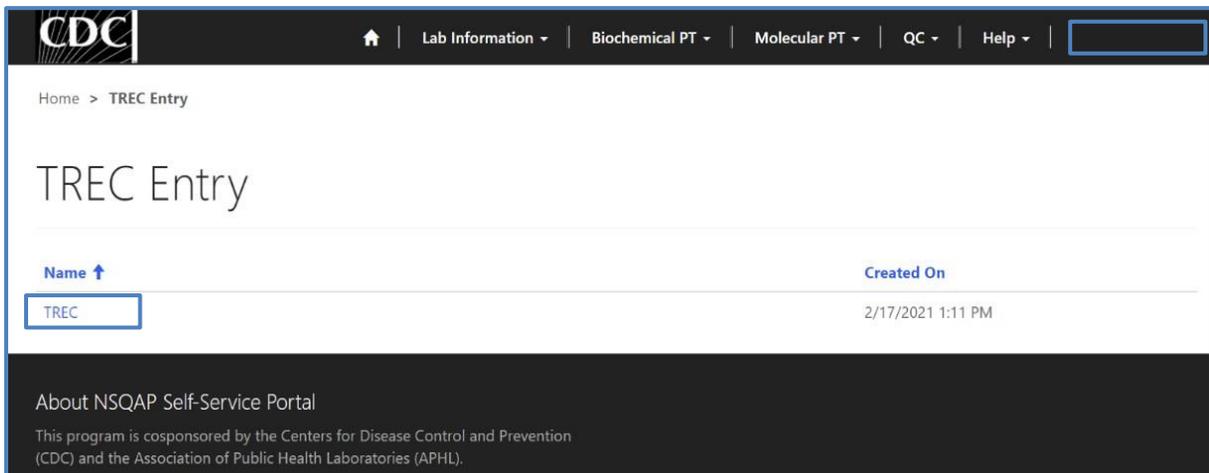
1.1 Navigation

To enter and save TRECPT data, navigate to the TRECPT program entry page. Access the page from the 'TREC Entry' option on the Molecular PT drop-down menu.

1. Click **'Molecular PT'** then **'TREC Entry'** from the drop-down menu.



2. Click **'TREC'** to navigate to the entry page.



3. Enter TRECPT method information and analyte data.

Home > T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)

T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)

Materials and Methods Information

Method Information

Select a Method- LDT refers to Lab Developed Test RUO refers to Research Use Only : *

Select a DNA extraction method: *

TREC Assay Primer and Probe Information

Was a commercial kit used? *

TREC probe sequence including dye and quencher: *

TREC forward amplification primer sequence: *

TREC reverse amplification primer sequence: *

Reference Gene Assay Primer and Probe Information

Select a reference gene: *

Was a commercial kit used? *

Reference gene probe sequence including dye and quencher: *

Reference gene forward amplification primer sequence: *

Reference gene reverse amplification primer sequence: *

TREC

Specimen	Clinical Assessment *	Comments
20211015001		
20211015002		
20211015003		
20211015004		
20211015005		

Participating laboratories must generate and submit their own results and must not share NSQAP PT test results or specimens with any other laboratory under ANY circumstance, even if the laboratory normally sends specimens to referral laboratories for routine or confirmatory testing. If participants are found to have falsified or shared results or specimens, the NSQAP committee will convene to discuss response actions for the participant which may include termination from the program.

Use of trade names is for identification only and does not imply endorsement by the Public Health Service, the U.S. Department of Health and Human Services, or the Association of Public Health Laboratories.

[Save](#)

About NSQAP Self-Service Portal

1.2 Materials & Method Information

Navigate to the page titled 'T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)' to enter materials and method information.

1. Enter method, DNA extraction method, TREC assay primer and probe information, and reference gene assay primer and probe information. Navigation details can be found in section 1.1.

The screenshot displays the 'T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)' web application. The interface includes a navigation bar with the CDC logo and menu items: Home, Lab Information, Biochemical PT, Molecular PT, QC, and Help. The main content area is titled 'T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)' and contains a search bar and the section 'Materials and Methods Information'. This section is divided into three main parts: 'Method Information', 'TREC Assay Primer and Probe Information', and 'Reference Gene Assay Primer and Probe Information'. Each part contains several input fields and dropdown menus for entering specific data.

Method Information

Select a Method- LDT refers to Lab Developed Test RUO refers to Research Use Only : *

Select a DNA extraction method: *

TREC Assay Primer and Probe Information

Was a commercial kit used? *

TREC probe sequence including dye and quencher: *

TREC forward amplification primer sequence: *

TREC reverse amplification primer sequence: *

Reference Gene Assay Primer and Probe Information

Select a reference gene: *

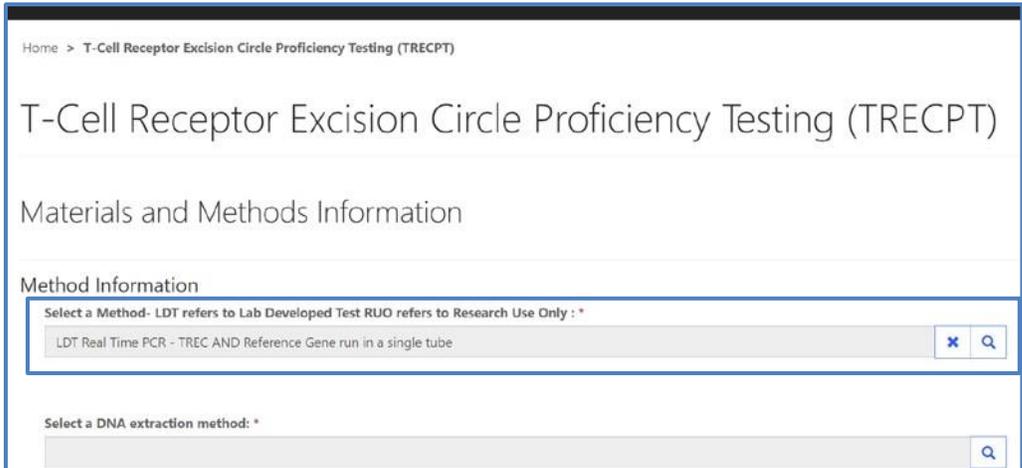
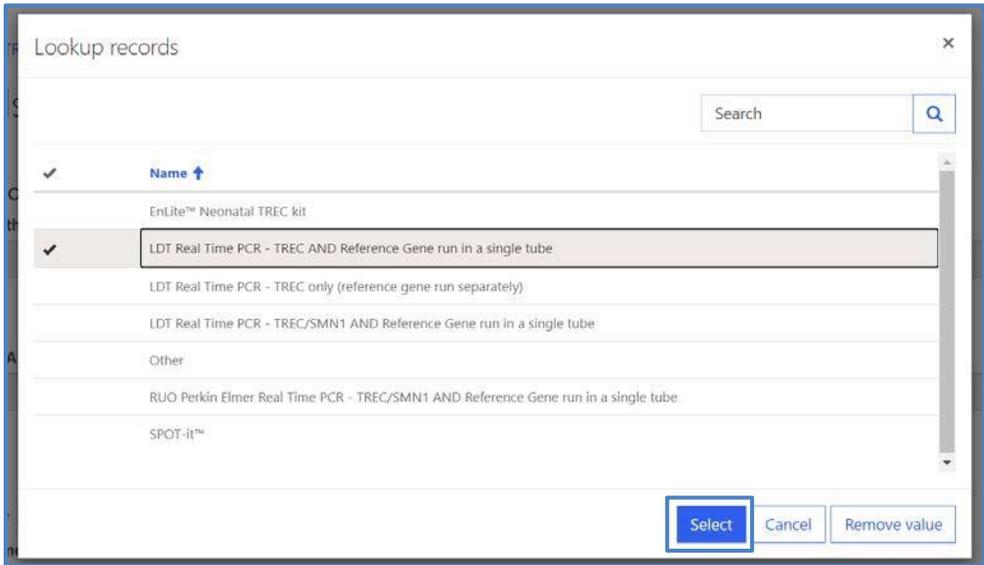
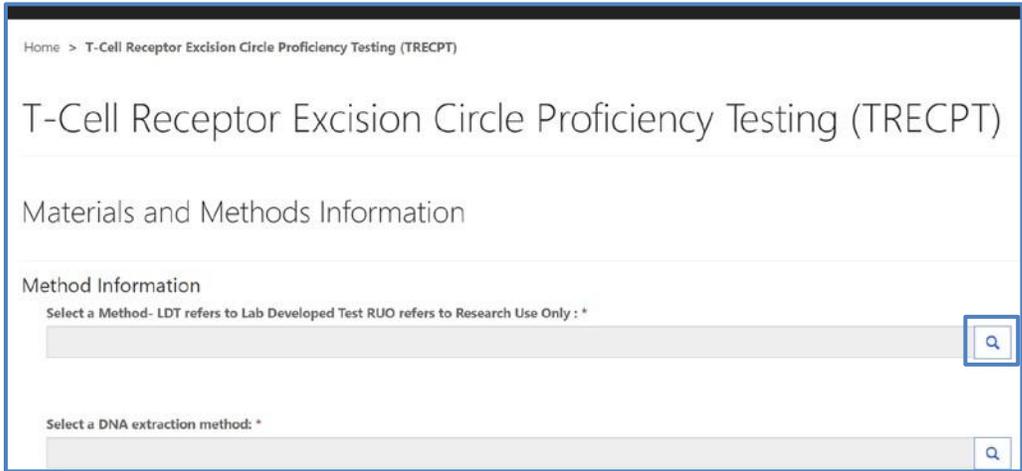
Was a commercial kit used? *

Reference gene probe sequence including dye and quencher: *

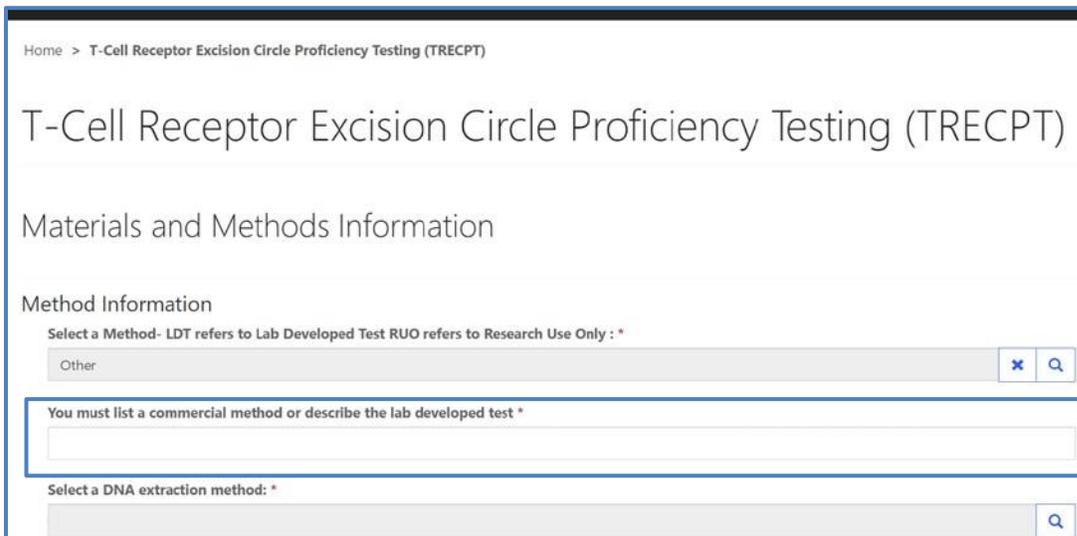
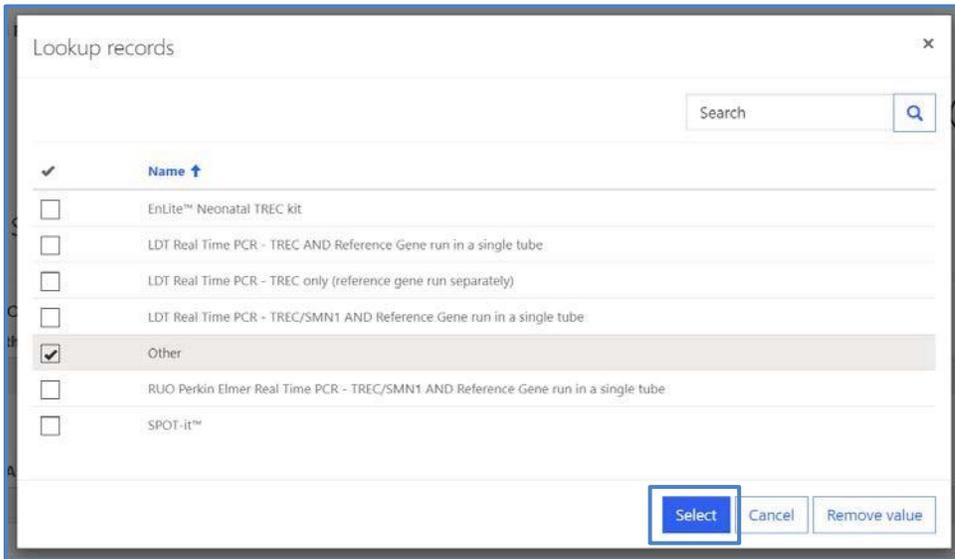
Reference gene forward amplification primer sequence: *

Reference gene reverse amplification primer sequence: *

2. Click on the magnifying glass to lookup methods and click 'Select'.



3. If 'Other' is selected, a text box will appear. You are **required** to list a commercial method or describe the lab developed test.



4. Click on the magnifying glass and select a DNA extraction method.

Home > T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)

T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)

Materials and Methods Information

Method Information

Select a Method- LDT refers to Lab Developed Test RUO refers to Research Use Only : *

Select a DNA extraction method: *

Lookup records

Search

Name ↑
EnLite™ (DNA is NOT extracted)
Extracta™ DBS with no wash
Extracta™ DBS with one wash
Generation™ DNA Elution Solution (S2 only)
Generation™ DNA Purification and Elution Solutions (S1/S2)
In situ/on card (DNA is NOT extracted)
Other
Darbin Elmar FIMA Extraction Columns

Select Cancel Remove value

Home > T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)

T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)

Materials and Methods Information

Method Information

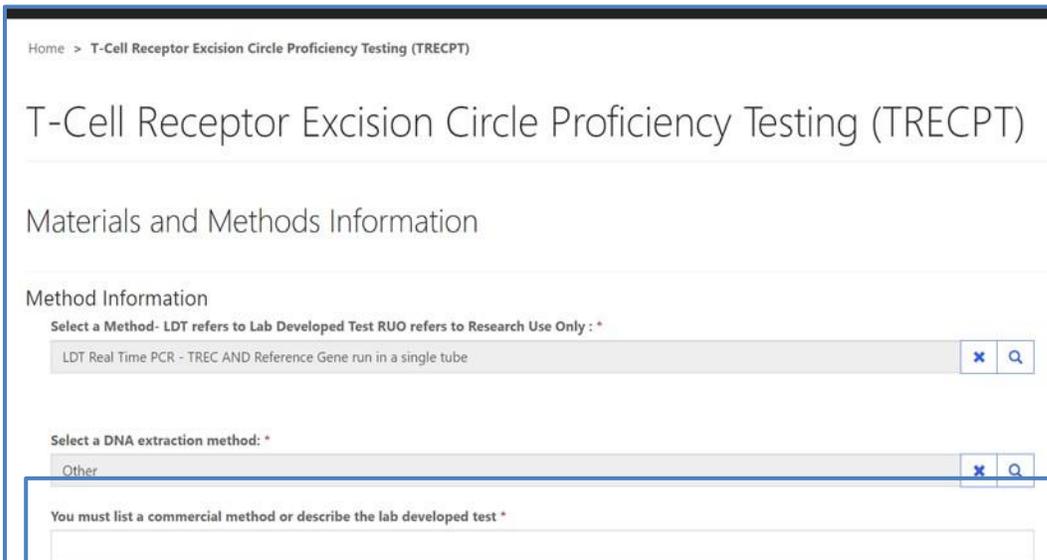
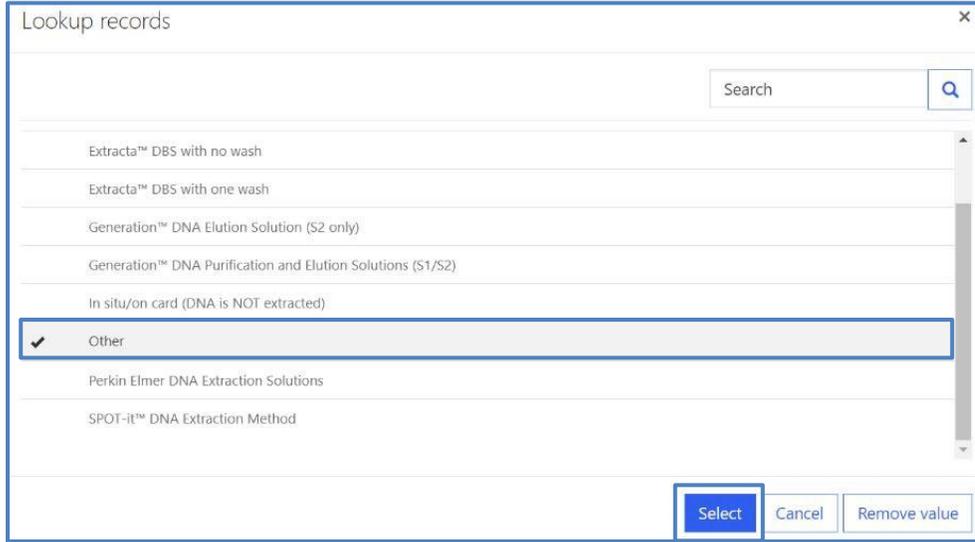
Select a Method- LDT refers to Lab Developed Test RUO refers to Research Use Only : *

LDT Real Time PCR - TREC AND Reference Gene run in a single tube

Select a DNA extraction method: *

Extracta™ DBS with one wash

5. If 'Other' is selected, you are **required** to list a commercial method or describe the lab developed test.



6. Enter 'TREC assay primer and probe information'.

Home > T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)

T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)

Materials and Methods Information

Method Information

Select a Method- LDT refers to Lab Developed Test RUO refers to Research Use Only : *

LDT Real Time PCR - TREC AND Reference Gene run in a single tube

Select a DNA extraction method: *

Extracta™ DBS with one wash

TREC Assay Primer and Probe Information

Was a commercial kit used? *

Yes

Reference Gene Assay Primer and Probe Information

Select a reference gene: *

7. Indicate whether a commercial was used by clicking the drop-down arrow.

TREC Assay Primer and Probe Information

Was a commercial kit used? *

Yes

No

Yes

8. If a commercial kit was used, no further information is required for the TREC assay primer and probe information section.

TREC Assay Primer and Probe Information

Was a commercial kit used? *

Yes

9. If a commercial kit was not used, additional probe and primer sequence information is required.

TREC Assay Primer and Probe Information

Was a commercial kit used? *

No

TREC probe sequence including dye and quencher: *

TREC forward amplification primer sequence: *

TREC reverse amplification primer sequence: *

TREC Assay Primer and Probe Information

Was a commercial kit used? *

No

TREC probe sequence including dye and quencher: *

5'-6-FAM/CGGTGATGCATAGGCACCTGC/3IABIK_FQ/-3'

TREC forward amplification primer sequence: *

5'-TTGTAAAGTGCCCACTCCTGT-3'

TREC reverse amplification primer sequence: *

5'-ATTCACCGTTCTCACGAGTTGCAATA-3'

10. Enter 'Reference gene assay primer and probe information'.

TREC Assay Primer and Probe Information

Was a commercial kit used? *

Yes

Reference Gene Assay Primer and Probe Information

Select a reference gene: *

Was a commercial kit used? *

Yes

11. Choose a reference gene by clicking the magnifying glass and clicking 'Select'.

TREC Assay Primer and Probe Information

Was a commercial kit used? *

No

TREC probe sequence including dye and quencher: *

5'-6-FAM/CGGTGATGCATAGGCACCTGC/3IABlk_FQ/-3'

TREC forward amplification primer sequence: *

5'-TTTGTAAGGTGCCCACTCTGT-3'

TREC reverse amplification primer sequence: *

5'-ATTCACCGTTCTCACGAGTTGCAATA-3'

Reference Gene Assay Primer and Probe Information

Select a reference gene: *

RNaseP subunit (RPP30)

TREC Assay Primer and Probe Information

Was a commercial kit used? *

No

TREC probe sequence including dye and quencher: *

5'-6-FAM/CGGTGATGCATAGGCACCTGC/3IABlk_FQ/-3'

TREC forward amplification primer sequence: *

5'-TTTGTAAGGTGCCCACTCTGT-3'

TREC reverse amplification primer sequence: *

5'-ATTCACCGTTCTCACGAGTTGCAATA-3'

Reference Gene Assay Primer and Probe Information

Select a reference gene: *

Was a commercial kit used? *

Yes

Lookup records

Search

✓ Name ↑

Beta-actin (ACTB)

Other

✓ RNaseP subunit (RPP30)

TaqMan™ RNase P Control Reagents Kit

Select Cancel Remove value

12. If 'Other' is selected, you are **required** to specify a gene name and symbol.

13. Indicate whether a commercial kit was used, by clicking the drop-down arrow.

The screenshot shows a form with the following fields:

- Was a commercial kit used? ***: A dropdown menu with "No" selected.
- TREC probe sequence including dye and quencher: ***: A text input field containing "5'-6-FAM/CGGTGATGCATAGGCACCTGC/3IABlk_FQ/-3'".
- TREC forward amplification primer sequence: ***: A text input field containing "5'-TTGTAAAGTGCCCACTCCTGT-3'".
- TREC reverse amplification primer sequence: ***: A text input field containing "5'-ATTCACCGTTCTCACGAGTTGCAATA-3'".
- Reference Gene Assay Primer and Probe Information**: A section header.
- Select a reference gene: ***: A search dropdown menu with "RNaseP subunit (RPP30)" selected.
- Was a commercial kit used? ***: A dropdown menu with "Yes" selected.

14. If a commercial kit was used, no further information is required for reference gene assay primer and probe information section.

The screenshot shows a zoomed-in view of the "Reference Gene Assay Primer and Probe Information" section. It includes:

- Select a reference gene: ***: A search dropdown menu with "RNaseP subunit (RPP30)" selected.
- Was a commercial kit used? ***: A dropdown menu with "Yes" selected.

15. If a commercial kit was not used, additional reference gene probe and primer sequence information is required.

The screenshot shows a zoomed-in view of the "Reference Gene Assay Primer and Probe Information" section. It includes:

- Select a reference gene: ***: A search dropdown menu with "RNaseP subunit (RPP30)" selected.
- Was a commercial kit used? ***: A dropdown menu with "No" selected.
- Reference gene probe sequence including dye and quencher: ***: An empty text input field.
- Reference gene forward amplification primer sequence: ***: An empty text input field.
- Reference gene reverse amplification primer sequence: ***: An empty text input field.

1.3 Results Entry

Navigate to the page titled 'T-Cell Receptor Excision Circle Proficiency Testing (TRECPT)' to enter TRECPT specimen clinical assessments and comments (optional). Navigation details can be found in section 1.1.

1. Select a clinical assessment for each of the five specimens by clicking the drop-down arrow.

TREC

Specimen Number 20211015001	Clinical Assessment * <input type="text"/>	Comments <input type="text"/>
Specimen Number 20211015002	Clinical Assessment * <input type="text"/>	Comments <input type="text"/>
Specimen Number 20211015003	Clinical Assessment * <input type="text"/>	Comments <input type="text"/>
Specimen Number 20211015004	Clinical Assessment * <input type="text"/>	Comments <input type="text"/>
Specimen Number 20211015005	Clinical Assessment * <input type="text"/>	Comments <input type="text"/>

Participating laboratories must generate and submit their own results and must not share NSQAP PT test results or specimens with any other laboratory under ANY circumstance, even if the laboratory normally sends specimens to referral laboratories for routine or confirmatory testing. If participants are found to have falsified or shared results or specimens, the NSQAP committee will convene to discuss response actions for the participant which may include termination from the program.

2. If necessary, enter optional comments into the appropriate comment box.

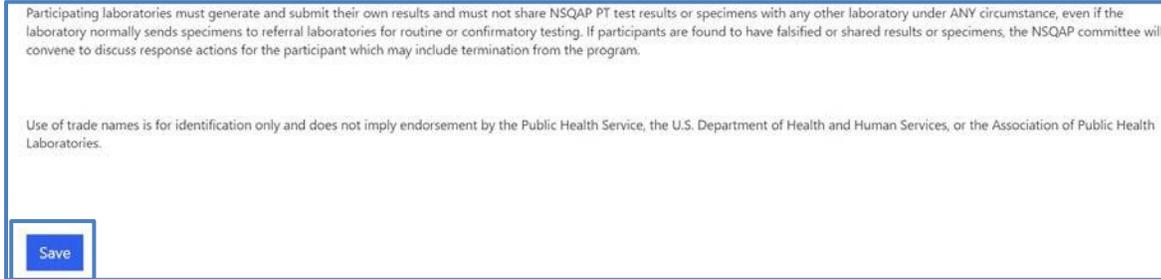
TREC

Specimen Number 20211015001	Clinical Assessment * <input type="text"/>	Comments <input type="text"/>
Specimen Number 20211015002	Clinical Assessment * <input type="text"/>	Comments <input type="text"/>
Specimen Number 20211015003	Clinical Assessment * <input type="text"/>	Comments <input type="text"/>
Specimen Number 20211015004	Clinical Assessment * <input type="text"/>	Comments <input type="text"/>
Specimen Number 20211015005	Clinical Assessment * <input type="text"/>	Comments <input type="text"/>

Participating laboratories must generate and submit their own results and must not share NSQAP PT test results or specimens with any other laboratory under ANY circumstance, even if the laboratory normally sends specimens to referral laboratories for routine or confirmatory testing. If participants are found to have falsified or shared results or specimens, the NSQAP committee will convene to discuss response actions for the participant which may include termination from the program.

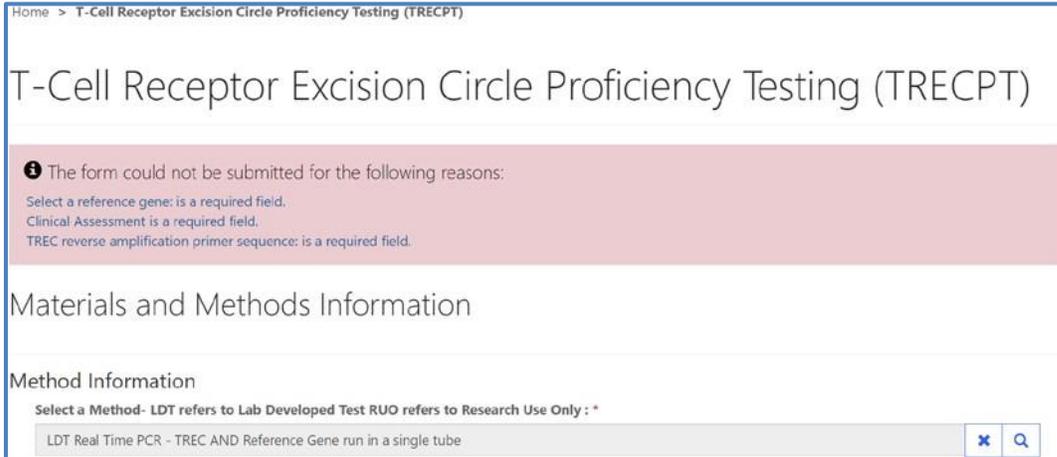
1.4 Save

1. Save TRECPT specimen results by clicking the **'Save'** button located at the bottom of the page.

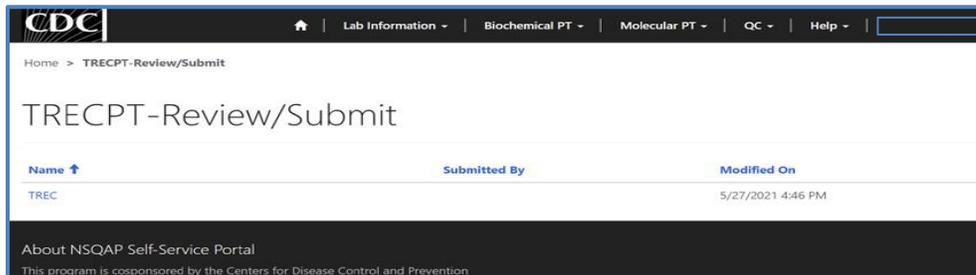


NOTE: All information & data must be saved at the same time. Data cannot be partially saved.

2. If you attempt to save the form without entering **all required fields**, you will receive an error message. Complete the missing fields and click 'Save' again.



3. After you have successfully saved your data and information, you will be redirected to the TRECPT review and submit page.



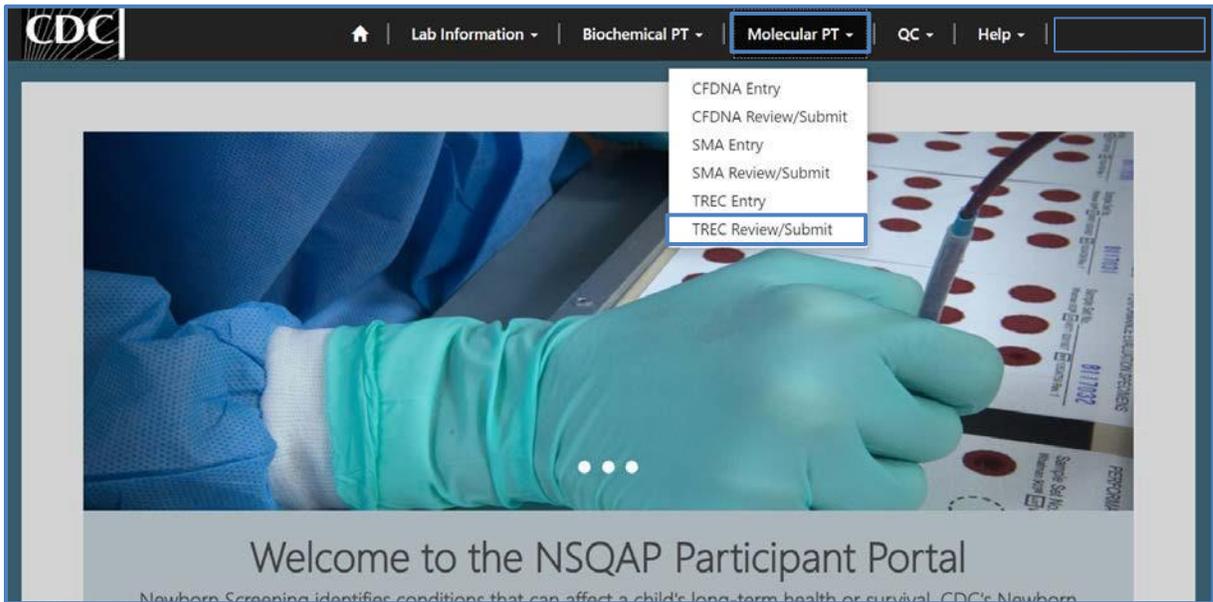
NOTE: The data entry page can be saved and re-saved as many times as needed, but each new save will overwrite the previous save(s).

2. TRECPT Review & Submit Page

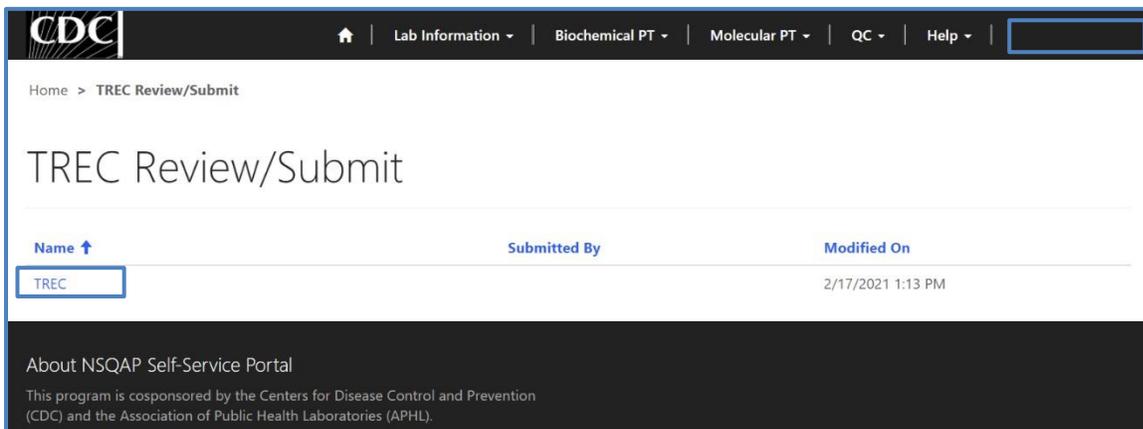
2.1 Navigation

Review and submit TRECPT specimen data after program information and results have been entered and saved (see section 1). Access the review/submit page via the 'TREC Review/Submit' option on the Molecular PT drop-down menu.

1. Location of the 'TREC Review/Submit' page on the main menu tool bar. Select '**Molecular PT**' then '**TREC Review/Submit**' from the drop-down menu.



2. The TREC Review/Submit landing page will appear. Select '**TREC**' to navigate to the review and submit page.



2.2 Review

1. Navigate to 'TREC Review/Submit Page' to review TRECPT method information and results in a read-only format.

The screenshot displays the 'TREC Review/Submit Page' on the CDC portal. The page is divided into several sections for data entry and review:

- Materials and Methods Information**
 - Method Information**: Includes fields for 'Select a Primary Method' (with options for LDT or Research Use Only), 'LDT Real Time PCR - TREC AND Reference Gene run in a single tube', and 'Other-You must list a commercial method or describe the lab developed test'.
 - Select a DNA extraction method:** Includes 'Extracta™ DB5 with one wash' and another 'Other-You must list a commercial method or describe the lab developed test' field.
- TREC Assay Primer and Probe Information**:
 - 'Was a commercial kit used?': No
 - 'TREC probe sequence including dye and quencher': 5'-6-FAM/CGGTGATGCATAGGCACCTGC/3IABIK_FQ/-3'
 - 'TREC forward amplification primer sequence': 5'-TTGTAAAGGTGCCCACTCTGT-3'
 - 'TREC reverse amplification primer sequence': 5'-ATTCACCGTCTCACGAGTTGCAATA-3'
- Reference Gene Assay Primer and Probe Information**:
 - 'Select a reference gene:': RNaseP subunit (RPP30)
 - 'Other-You must specify gene name and symbol':
 - 'Was a commercial kit used?': No
 - 'Reference gene probe sequence including dye and quencher': 5'-HEX/TTCTGACCTGAAGGCTCTGCGCG/3IABIK_FQ/-3'
 - 'Reference gene forward amplification primer sequence': 5'-CACCATGGCAATGAGCGGTTTC-3'
 - 'Reference gene reverse amplification primer sequence': 5'-AGGTCCTTGGGATGTCACGT-3'
- TREC Results Table**:

Specimen	Clinical Assessment *	Comments
20211015001	Screen Negative (no follow up req.)	—
20211015002	Screen Positive (TREC out of range)	—
20211015003	Unsatisfactory sample (TREC and r)	—
20211015004	Screen Negative (no follow up req.)	—
20211015005	Unsatisfactory sample (TREC and r)	—

At the bottom, a note states: 'After you click submit your submission will be locked and cannot be changed. Navigate to the TREC Entry Page to Make Edits'. A 'Submit' button is located at the bottom left.

- If edits are necessary, navigate back to the TREC entry page and make changes as described in section 1 or click the link **‘Navigate to the TRECPT Entry Page to Make Edits’**.

TREC

Specimen	Clinical Assessment *	Comments
20211015001	Screen Negative (no follow up req)	—
Specimen 20211015002	Clinical Assessment * Screen Positive (TREC out of range,	Comments —
Specimen 20211015003	Clinical Assessment * Unsatisfactory sample (TREC and r	Comments —
Specimen 20211015004	Clinical Assessment * Screen Negative (no follow up req)	Comments —
Specimen 20211015005	Clinical Assessment * Unsatisfactory sample (TREC and r	Comments —

After you click submit your submission will be locked and cannot be changed. [Navigate to the TREC Entry Page to Make Edits](#)

- After reviewing, submit your results by clicking the ‘Submit’ button. See section 2.3 for additional details.

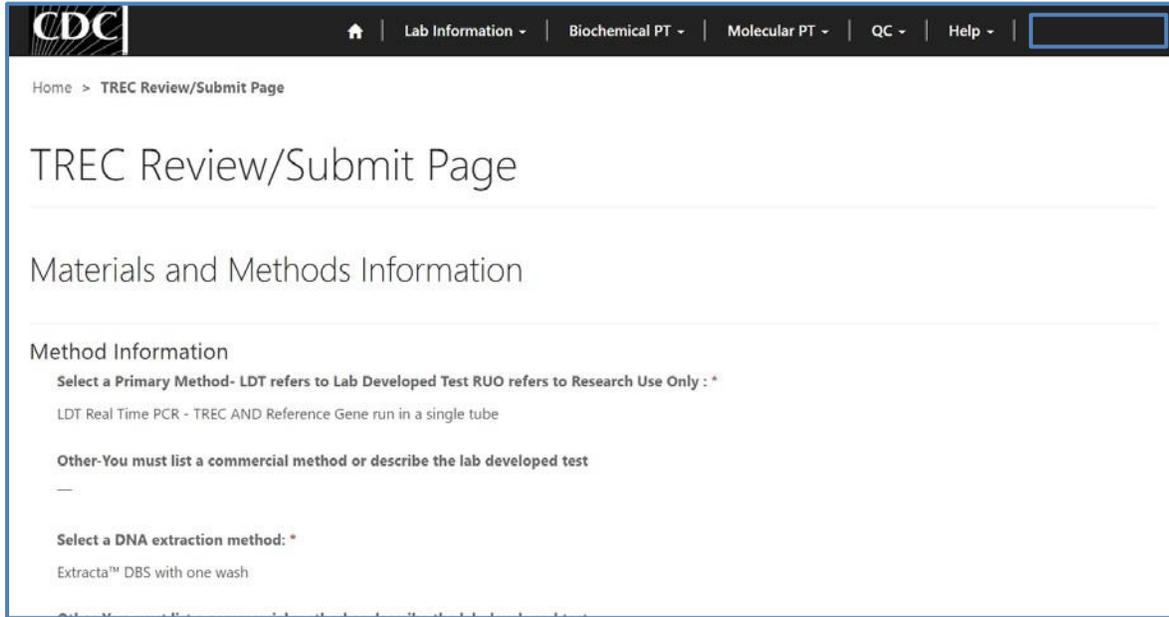
20211015002	Screen Positive (TREC out of range,	—
Specimen 20211015003	Clinical Assessment * Unsatisfactory sample (TREC and r	Comments —
Specimen 20211015004	Clinical Assessment * Screen Negative (no follow up req)	Comments —
Specimen 20211015005	Clinical Assessment * Unsatisfactory sample (TREC and r	Comments —

After you click submit your submission will be locked and cannot be changed. [Navigate to the TREC Entry Page to Make Edits](#)

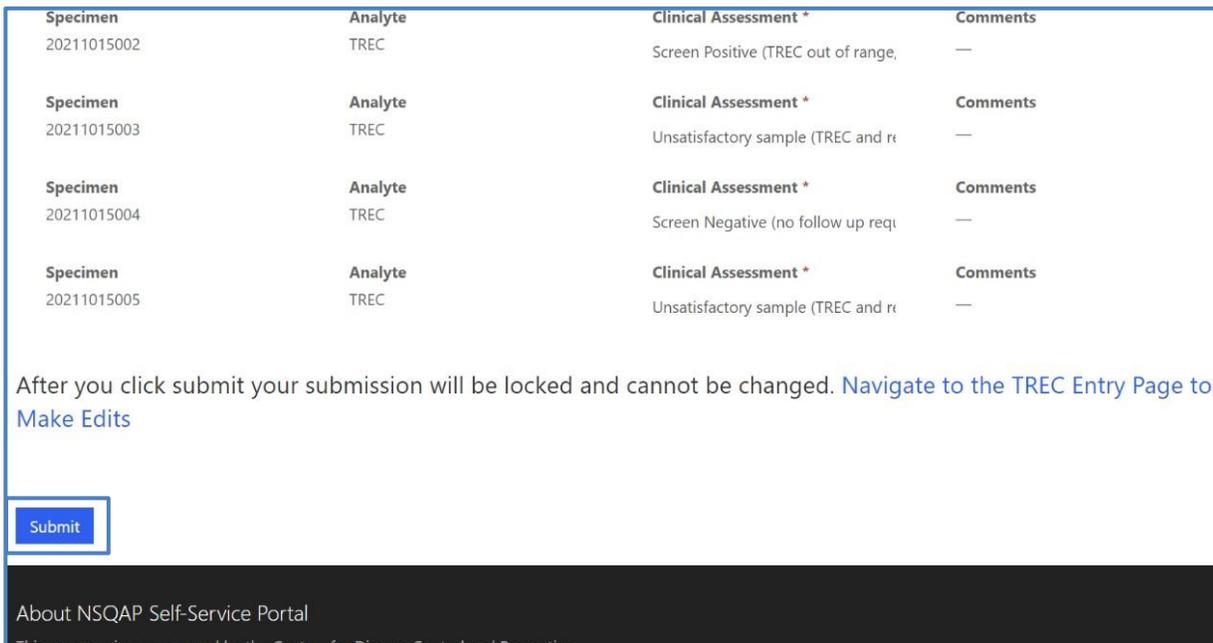
About NSQAP Self-Service Portal

2.3 Submit

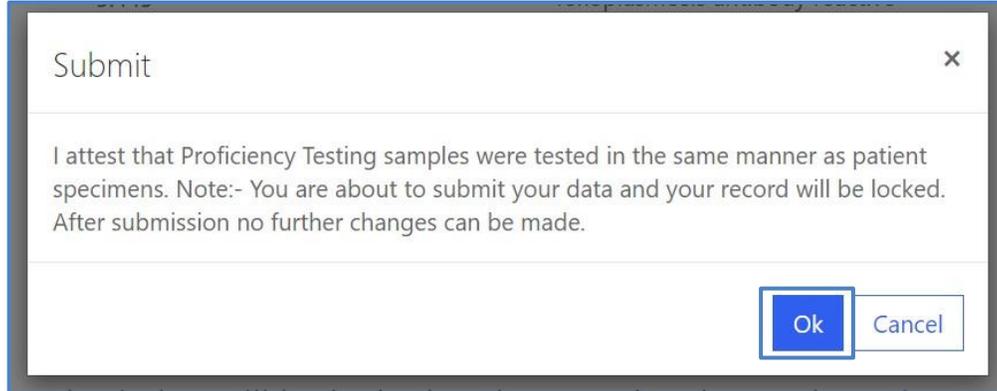
1. Navigate to 'TREC Review/Submit Page' to submit TRECPT method information and results.



2. After reviewing the TREC review and submit page, submit results by clicking the 'Submit' button located at the bottom of the page.

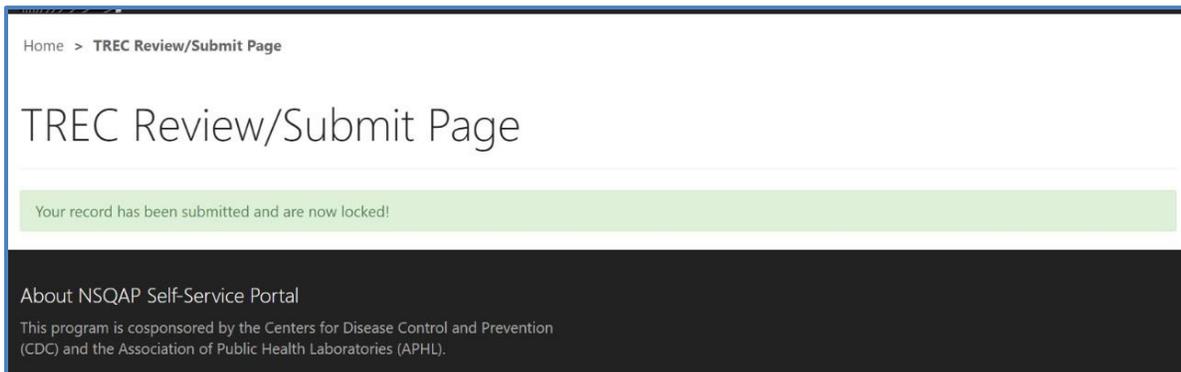


3. You will be prompted to confirm that you are ready to submit. Click **'Ok'** to confirm and submit your TRECPT results.



NOTE: You are only allowed to submit your results **ONCE**. You must review and ensure your entered information and results are accurate **PRIOR** to submitting.

4. You will be directed to a confirmation page after submitting results.



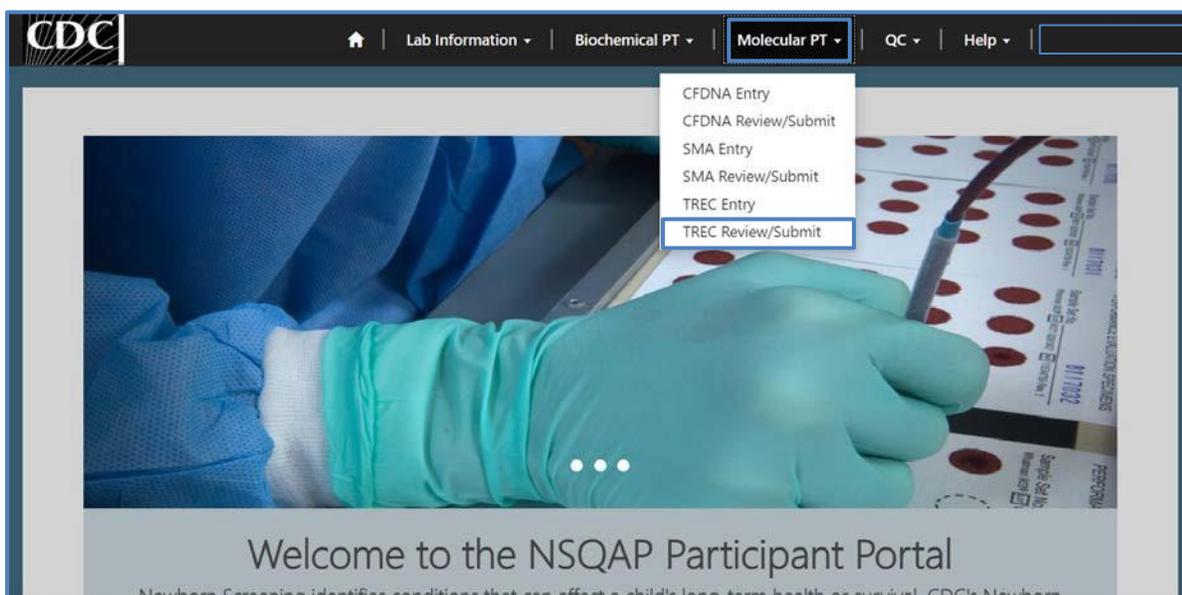
5. TRECPT data entry page cannot be accessed after submission. You can view your submitted data in a read-only format by accessing the review and submit page (see sections 2.1 and 2.2).

2.4 Save Data – Pdf Format

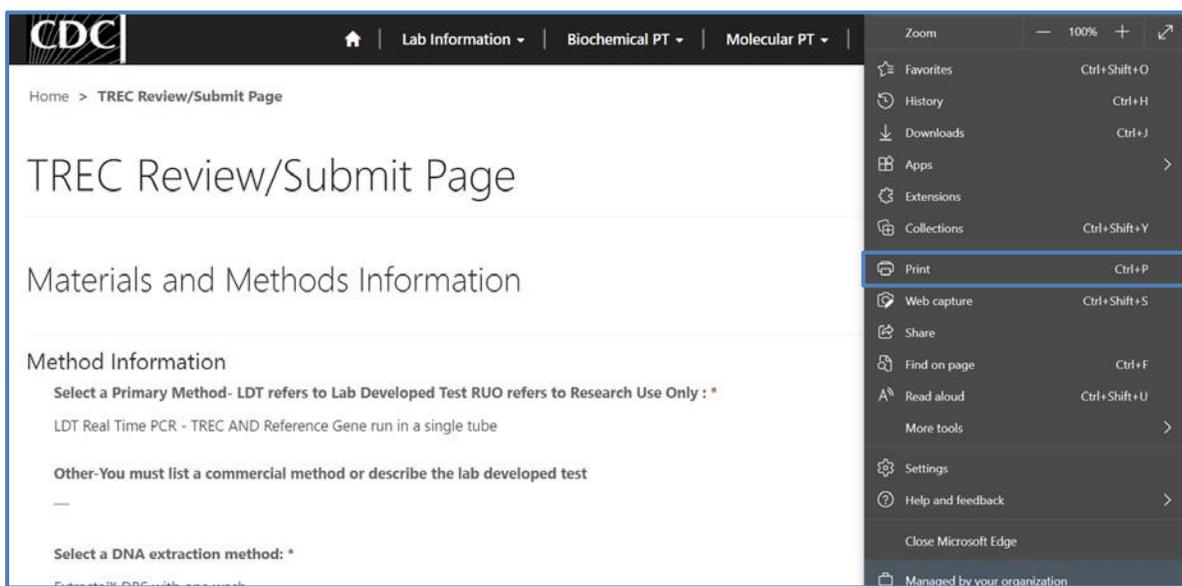
Submitted data can be saved in a pdf format by using the ‘Save a PDF’ function included in your web browser.

Note: The location and appearance of this functionality will vary depending on the web browser being used.

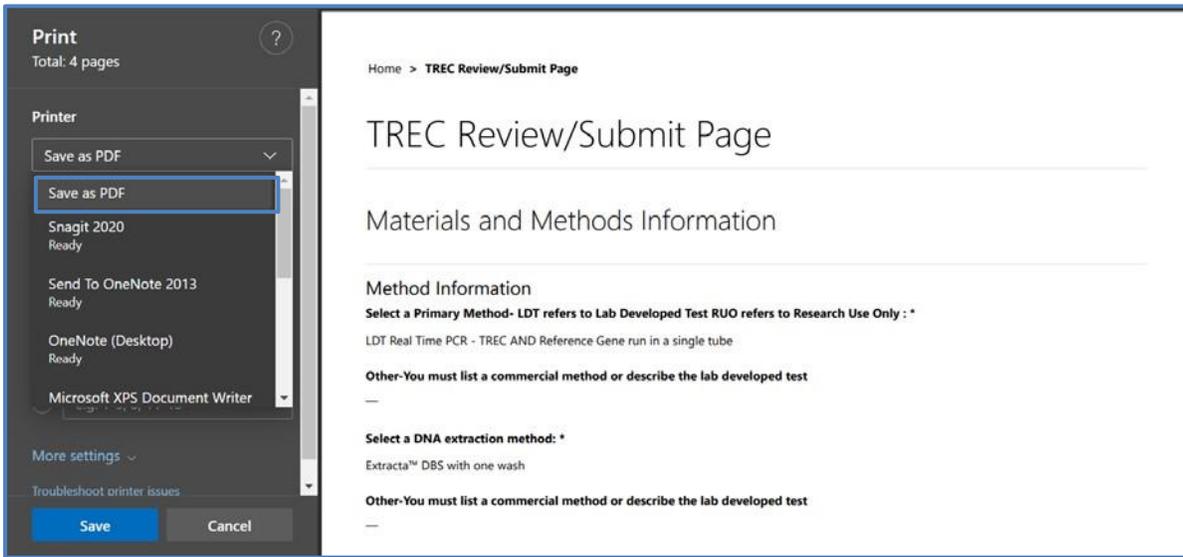
1. Navigate to the review and submit page as described in section 2.1.



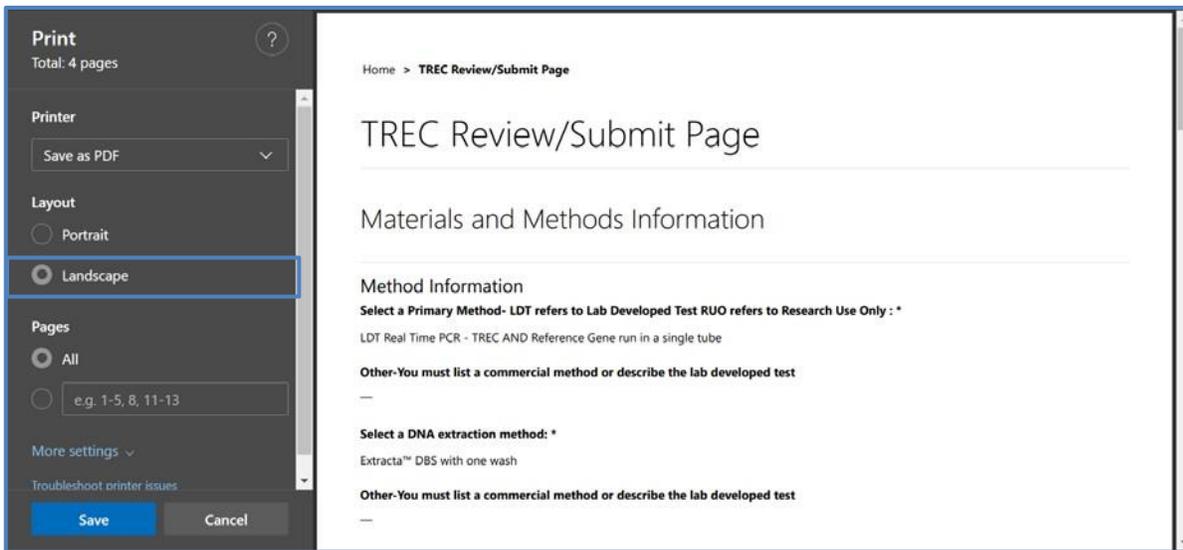
2. Locate the ‘Print’ function on your web browser.



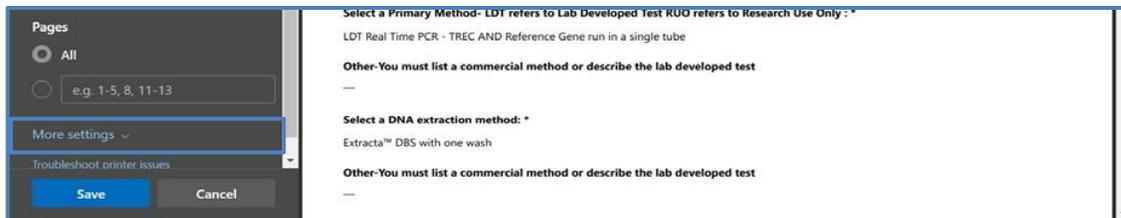
3. Select 'Save as PDF'.



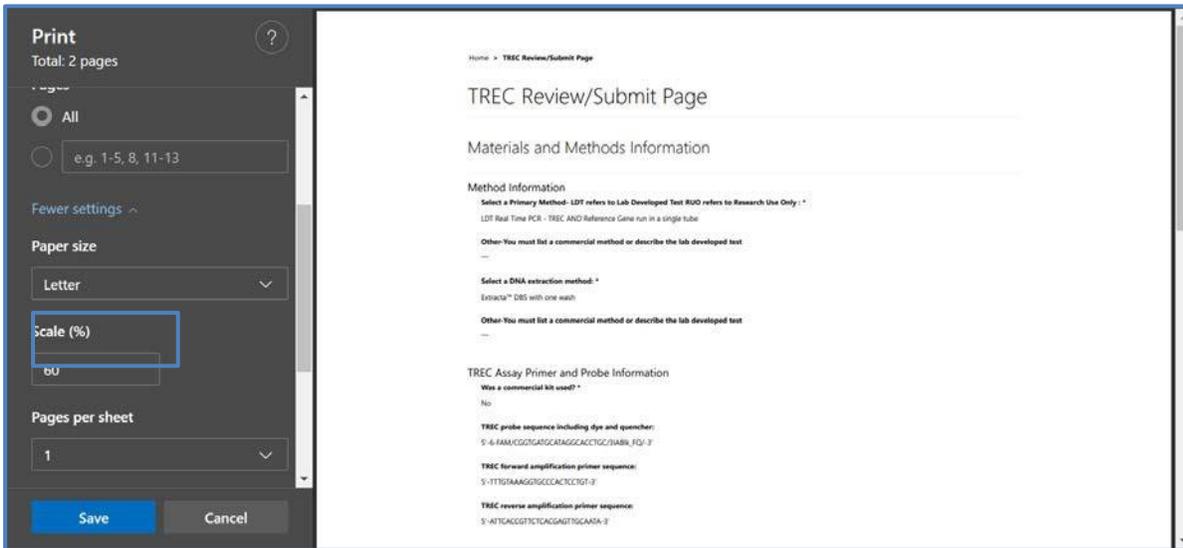
4. Select 'Landscape' as the layout choice.



5. Select 'More Settings'.



6. Adjust the scale percentage to 60%.



7. Select 'Save' to save the pdf file to your local drive's folder of choice.

