



■ WIPO Sequence デスクトップツール

ウェビナートレーニング

本日のトピック

- ツールの目的
- インターフェイス内の主なビュー：プロジェクトホーム、プロジェクトの詳細
- 主な機能:
 - プロジェクトおよび配列の作成
 - 配列データのインポート – サポートされている様々な形式
 - 配列データの検証 – 検証レポート
 - プロジェクトデータの追加 – feature keyとqualifier
 - ST.26準拠の配列リストの作成
- 言語サポートおよびシステム環境設定の変更

今回取り扱わないトピック

- WIPO ST.26入門編の対象となる教材
- このモジュールを終了していない場合は WIPO 標準 ST.26 を参照してください。 :

<https://www.wipo.int/export/sites/www/standards/en/pdf/03-26-01.pdf>

デスクトップツールの目的

- 2022年1月1日以降、国際レベル、国内レベル、広域レベルで申請されたすべての配列リストはWIPO標準ST.26に準拠する必要がある
- WIPO ST.26 準拠の配列リストを作成および検証するためにWIPOが共通のデスクトップツールを作成
- WIPOが作成したツールによって世界中の全出願人が同じ無料ツールにアクセスできるようになる

WIPO Sequence: インストール

- WIPO Sequence デスクトップツールは MS Windows、Mac OSX、Linuxの運用システムで利用可能
- 新バージョンが利用可能になると自動更新機能がユーザーに通知する
- 全てのインストールパッケージおよびユーザーサポート資料は WIPO Sequenceのホームページからダウンロード可能：<https://www.wipo.int/standards/en/sequence>

WIPO Sequence: 重要

- WIPO Sequence に入力された全ての生成配列リストおよびプロジェクトデータはローカルに保存される（ユーザーのコンピュータ上）
- オフラインでプロジェクトを作成したり、配列リストを生成したりできるが、自動更新機能にはインターネットへの接続が必要となる
- WIPO Sequenceは全ての出願人がソースコードの提供不要で使用できるように無料で提供されている

プロジェクトホーム



WIPO | Sequence

PROJECTS

PERSONS & ORGANIZATIONS

ORGANISMS

HELP



PREFERENCES

ENGLISH



NEW PROJECT

IMPORT PROJECT

IMPORT SEQUENCE LISTING


VALIDATE SEQUENCE LISTING

PROJECTS



| Project name ◦ | Applicant file reference | Applicant name | Invention title | Status | Creation Date 📅 |
|------------------------------------|--------------------------|----------------|--|-----------|-----------------|
| Test ST.26 Import | | | | new | 2019-04-03 |
| SampleValidProject | 14283.6000-00000 | BIOMX LTD. | BACTERIOPHAGE FOR MODULATING INFLAMMATORY BOWEL DISEASE | generated | 2019-04-04 |


プロジェクトの詳細

 **WIPO Sequence** DEMONSTRATION PROJECT VERIFICATION REPORT FREE TEXT QUALIFIERS IMPORT REPORT DISPLAY THE SEQUENCE LISTING PREFERENCES ENGLISH [Back To List](#)

GENERAL INFORMATION SEQUENCES

DEMONSTRATION PROJECT

[Print](#) [Export](#) [Import Another Project](#) [Validate](#) [Generate Sequence Listing](#)

| | | |
|--|--------------------------|---|
| Project Name Demonstration Project | Creation date 2019-01-30 |  |
| File Name Sequence-list-import | Sequences 6 | |
| Description This is a description for the project. | Status generated | |

▶ GENERAL INFORMATION

▶ SEQUENCES

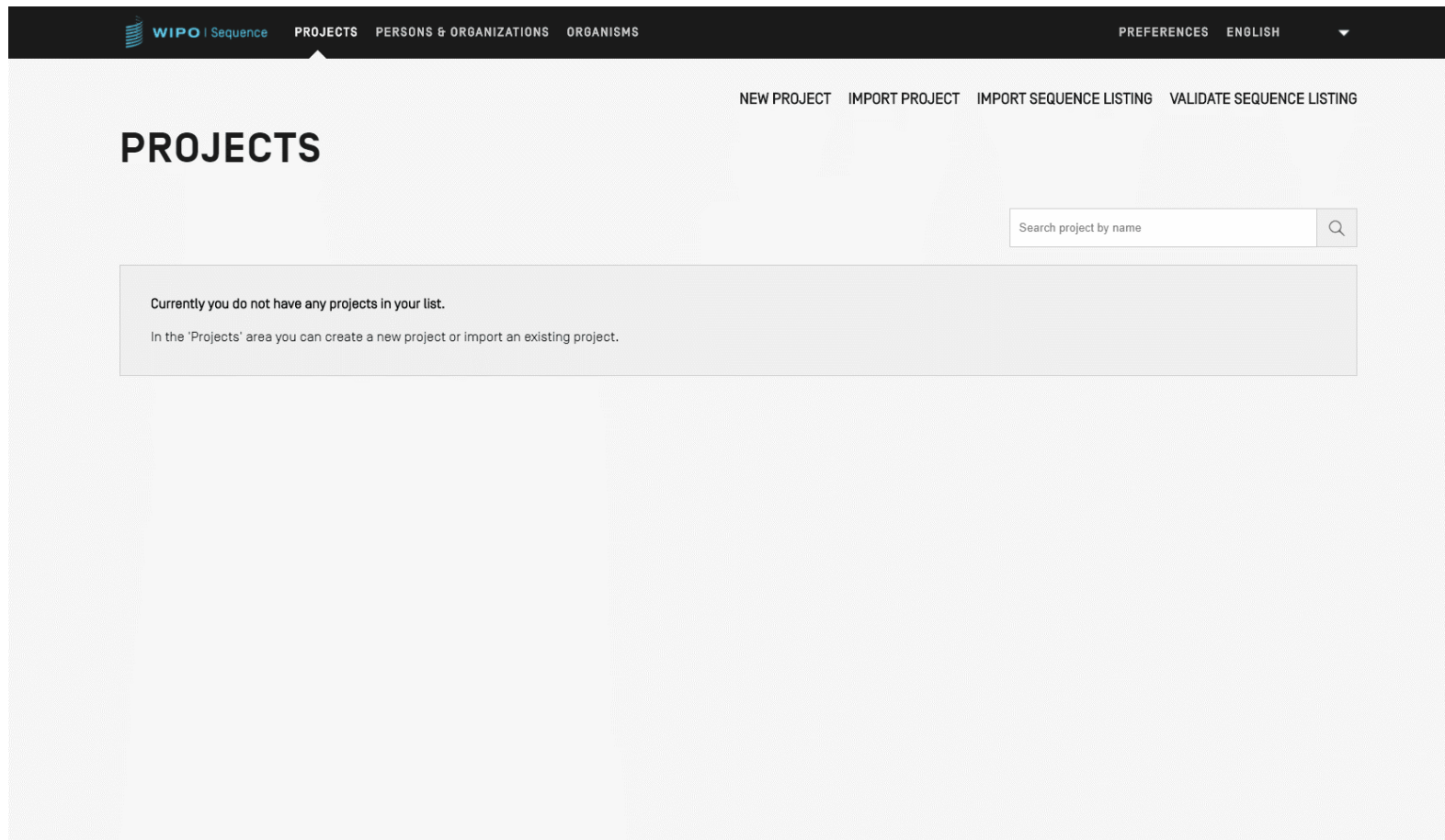
主な機能(1)

- プロジェクトの作成：
 - 一般情報
 - 配列
 - プロジェクトの検証
 - ST.26 SLの生成
 - SLの印刷
 - ST.26 SLの検証
- ユーザーのリスト：
 - ユーザーの生物
 - 個人/法人

主な機能(2)

- インポート：
 - 既存のSL: ST.25/ST.26
 - 共通形式: FASTA/raw/multi-sequence
 - 既存の ST.26 プロジェクト
- ツール機能：
 - システム環境設定
 - 多言語サポート
 - 自動更新
- ツールの全機能については WIPO Sequenceデスクトップマニュアルに掲載されている：
https://www.wipo.int/export/sites/www/standards/en/sequence/wipo_sequence_manual_1_0_0.pdf

プロジェクトの作成（デモ）



The screenshot displays the 'PROJECTS' section of the WIPO Sequence application. At the top, a dark navigation bar contains the WIPO logo and menu items: 'WIPO | Sequence', 'PROJECTS', 'PERSONS & ORGANIZATIONS', 'ORGANISMS', 'PREFERENCES', and 'ENGLISH'. Below the navigation bar, a secondary menu offers options: 'NEW PROJECT', 'IMPORT PROJECT', 'IMPORT SEQUENCE LISTING', and 'VALIDATE SEQUENCE LISTING'. The main heading 'PROJECTS' is prominently displayed on the left. To the right, there is a search input field labeled 'Search project by name' with a magnifying glass icon. A light gray message box in the center of the page states: 'Currently you do not have any projects in your list. In the 'Projects' area you can create a new project or import an existing project.'

プロジェクトの詳細を追加：一般情報

WIPO | Sequence
Return to project homeINSECTICIDAL PROTEINS
VERIFICATION REPORT
FREE TEXT QUALIFIERS
IMPORT REPORT
DISPLAY THE SEQUENCE LISTING
HELP
PREFERENCES
ENGLISH

| | | |
|---|---|---|
| Project Name Insecticidal Proteins Status modified Description Insecticidal proteins and methods for their use Source language code for free text qualifiers en Original free text language code en | Creation date 2021-04-07 File Name Insecticidal Proteins SL Sequences 0 Non English free text language code fr | ✎ |
|---|---|---|

GENERAL INFORMATION

APPLICATION IDENTIFICATION

| | |
|--|---|
| IP Office | ▼ |
| Application Identification* <ul style="list-style-type: none"> <input checked="" type="radio"/> Before the assignment of the application number <input type="radio"/> After the assignment of the application number | <b style="color: red;">Applicant file reference* Application File Reference is a mandatory field when 'Before the assignment of the application number' is provided. |

プロジェクトの詳細を追加：新しい配列

- プロジェクト詳細画面内で配列を作成する、またはプロジェクトに配列をインポートすることが可能

The screenshot shows the top navigation bar of the WIPO Sequence database. The main navigation menu includes: WIPO | Sequence, INSECTICIDAL PROTEINS, VERIFICATION REPORT, FREE TEXT QUALIFIERS, IMPORT REPORT, DISPLAY THE SEQUENCE LISTING, HELP, PREFERENCES, and ENGLISH. A 'Return to project home' button is located in the top right corner. Below the navigation bar, the 'GENERAL INFORMATION' and 'SEQUENCES' tabs are visible. The 'SEQUENCES' section is active, displaying a heading 'SEQUENCES' and a row of buttons: 'Create new sequence', 'Import sequence', 'Insert Sequence', 'Reorder Sequence', and 'Bulk Edit'. The 'Create new sequence' and 'Import sequence' buttons are highlighted with a red border. Below the buttons is a table with the following columns: Sequence ID Number, Sequence Name, Length, Molecule Type, and Organism.

| Sequence ID Number | Sequence Name | Length | Molecule Type | Organism |
|--------------------|---------------|--------|---------------|----------|
|--------------------|---------------|--------|---------------|----------|

配列の作成

SEQUENCES

Create new sequence Import sequence Insert Sequence Reorder Sequence

| Sequence ID Number | Sequence Name | Length | INSDSeqMoltype | Organism |
|--------------------|-----------------|--------|----------------|----------|
| 1 | WIPO Sequence | | | |

INSECTICIDAL PROTEINS VERIFICATION REPORT FREE TEXT QUALIFIERS IMPORT REPORT DISPLAY THE SEQUENCE LISTING HELP PREFERENCES ENGLISH Return to project home

1 2

Sequence Name*
Name/description for sequence

Molecule Type*
DNA

Residues*
agagagagagagagagagatttaaaatttttagagaatattagagagatatataggaagtatataggatatgagagtatagaggatatagggatata

Organism name
unidentified

Qualifier Molecule Type
genomic DNA

Mark as an intentionally skipped sequence
 The sequence contains both DNA & RNA fragments

Cancel Create sequence Create & Display Sequence

スキップされた配列


- ST.25と同様に、スキップされた配列はシリーズ「000」で表される
- スキップされた配列は以下のボックスをチェックすることで表示される

SEQUENCE 2

| | |
|---|------------------------------------|
| Sequence Name* EP130135_N2067-7148W0 - SL_seq_2 | Sequence Number (ID) 2 |
| Molecule Type* AA | Length 45 |
| Organism name synthetic construct | Qualifier Molecule Type protein |
| <input checked="" type="checkbox"/> Mark as an intentionally skipped sequence | |

[Cancel](#)[Update sequence](#)

配列の並べ替え (デモ)

 INSECTICIDAL PROTEINS
VERIFICATION REPORT
FREE TEXT QUALIFIERS
IMPORT REPORT
DISPLAY THE SEQUENCE LISTING
HELP
PREFERENCES
ENGLISH
Return to project home

GENERAL INFORMATION SEQUENCES

SEQUENCES

Create new sequence
Import sequence
Insert Sequence
Reorder Sequence
Bulk Edit

| Sequence ID Number | Sequence Name | Length | Molecule Type | Organism |
|--------------------|--------------------------|--------|---------------|---------------------|
| 1 | Error four testing_seq_1 | 1004 | DNA | unidentified |
| 2 | Error four testing_seq_2 | 191 | AA | unidentified |
| 3 | Error four testing_seq_3 | 1004 | DNA | synthetic construct |
| 4 | Error four testing_seq_4 | 191 | AA | synthetic construct |
| 5 | Error four testing_seq_5 | 795 | DNA | synthetic construct |
| 6 | Error four testing_seq_6 | 264 | AA | synthetic construct |

既存の配列表のインポート

WIPO | Sequence PROJECTS PERSONS & ORGANIZATIONS ORGANISMS PREFERENCES ENGLISH

NEW PROJECT IMPORT PROJECT IMPORT SEQUENCE LISTING VALIDATE SEQUENCE LISTING

insecticidal proteins.xml Upload ST.25 [.txt] or ST.26 [.xml] file **1**

Project Name **3**
Import Sequence Project

Select Range Sequences

Select the general information contents to be imported

PROJECTS

Project name : Applicant file referen... Creation Date

Abrir

Organizar Nueva carpeta

| Nombre | Fecha de modifica... | Tipo |
|---|----------------------|-------------------|
| ST26T-1087 | 02/07/2019 13:54 | Carpeta de archiv |
| 9_ST25_9238084_DTD_Based.xml | 17/08/2017 18:33 | Documento XML |
| changedata.xml | 04/07/2019 10:17 | Documento XML |
| Insecticidal Proteins (1).xml | 05/07/2019 12:52 | Documento XML |
| Insecticidal Proteins.xml 2 | 25/06/2019 18:50 | Documento XML |
| Invalid_project.xml | 02/07/2019 9:49 | Documento XML |
| Noseqs0.xml | 08/07/2019 14:44 | Documento XML |
| Opt_Soy_Loci.xml | 11/03/2019 15:45 | Documento XML |
| QN_1.xml | 02/07/2019 14:37 | Documento XML |
| Results QV 29.xml | 11/07/2019 15:00 | Documento XML |
| ST_25_import_complex.txt | 05/07/2019 13:42 | Documento de te |
| ST_25_Long.txt | 04/07/2019 14:24 | Documento de te |

Nombre: Insecticidal Proteins.xml **2** .txt.xml (*.txt;*.xml)

Abrir **Cancelar**

Cancel **Import Sequence Listing**

ST.25配列表のインポート (1)

- WIPO Sequenceは ST.25形式の配列のインポートをサポート
- インポートされたファイルに存在しないST.26必須項目については、以下を含めてユーザーが手動で入力する必要がある：
 - SOURCE/source: 分子型と生物
 - Featureの必須Qualifier 例：CDS feature
- 付録VIIIに記載されている推奨事項に従って実施する（新規事項を追加せずにST.25からST.26に移行するための推奨事項）

ST.25配列表のインポート(2)

- WIPO Sequenceはインポートの際、プロジェクトに含まれる前にインポートされたデータにいくつかの変更を加える
- 以下を含む：
 - すべての「u」残基が「t」
 - 分子型 (i) ADNをDNAに (ii) ARNをRNAに (iii) PRTをAAに置き換える
 - 「ArtificialSequence」および指定された同等物（UC12、ステップ5を参照）を「synthetic construct」に置き換える
 - 「不明」（指定された同等物）を「未確認」に置き換える
 - 3文字コードのアミノ酸記号を1文字コードに置き換える

FASTA形式のインポート

WIPO | Sequence INSECTICIDAL PROTEINS VERIFICATION REPORT FREE TEXT QUALIFIERS IMPORT REPORT DISPLAY THE SEQUENCE LISTING HELP PREFERENCES ENGLISH Return to project home

D:\test data\USPTO Test files\FASTA_multisequence_1.fasta Upload file [.txt, .xml, .FASTA]

Select Range of Sequence IDs * Molecule Type*

This field is mandatory and a value is required. Choose a default sequence molecule type for the selected Sequence ID range.

Check to save this description as a note.

| Sequence Number [ID] | |
|----------------------|--|
| 1 | >AAN76654.1 Est1 partial |
| 2 | >BAC11014.1 deletion isoform of telomerase reverse transcriptase |
| 3 | >CAA98800.1 CDC13 |
| 4 | >AF411028.1 Saccharomyces pastorianus Est1 gene |
| 5 | >AB086379.1 Homo sapiens hTERT mRNA deletion isoform of telomerase reverse transcriptase |

⏪ ⏩ 1 2 ⏪ ⏩

RAW形式のインポート

WIPO | Sequence
Return to project homeINSECTICIDAL PROTEINS
VERIFICATION REPORT
FREE TEXT QUALIFIERS
IMPORT REPORT
DISPLAY THE SEQUENCE LISTING
HELP
▼ PREFERENCES ENGLISH ▼

| | | | | |
|----|-----------------------|-----|----|------------------------|
| 20 | 141 error test_seq_48 | 680 | AA | Listeria monocytogenes |
|----|-----------------------|-----|----|------------------------|

⏪ ⏩ 1 2 ⏪ ⏩

D:\test data\raw_test.txt Upload file [.txt, .xml, .FASTA]

The file selected is in raw format. Please select the sequence molecule type in order to import the sequence.

| | | |
|----------------|-------------------------|---|
| Sequence Name* | Molecule Type* | ▼ |
| Organism name | Qualifier Molecule Type | ▼ |

Cancel
Import sequence

多重配列のインポート

WIPO | Sequence

INSECTICIDAL PROTEINS VERIFICATION REPORT FREE TEXT QUALIFIERS IMPORT REPORT DISPLAY THE SEQUENCE LISTING HELP PREFERENCES ENGLISH

Return to project home

| | | | | |
|--------------------|-----------------------|-----|-----|------------------------|
| 17 | 141 error test_seq_44 | 261 | AA | Homo sapiens |
| 18 | 141 error test_seq_46 | 29 | DNA | Homo sapiens |
| 19 | 141 error test_seq_47 | 29 | DNA | Homo sapiens |
| 20 | 141 error test_seq_48 | 680 | AA | Listeria monocytogenes |

⏪ ⏩ 1 2 ⏪ ⏩

D:\test data\Multisequence.txt

Select Range of Sequence IDs

配列リストのインポート（デモ）



WIPO | Sequence

PROJECTS

PERSONS & ORGANIZATIONS

ORGANISMS

PREFERENCES ENGLISH

[NEW PROJECT](#) [IMPORT PROJECT](#) [IMPORT SEQUENCE LISTING](#) [VALIDATE SEQUENCE LISTING](#)

PROJECTS



| Project name : | Applicant file reference | Applicant name | Invention title | Status | Creation Date |
|---------------------------------------|--------------------------|----------------|-----------------|--------|---------------|
| Insecticidal Proteins | | | | new | 2019-05-09 |

インポートレポート (1)

- インポート中に変更またはエラーまたは警告があった場合、インポートレポートが作成される
- このレポートに記載されているメッセージにはユーザーが手動入力する必要のある特定の配列が表示される
- インポートレポートには分類、関連する ST.25 タグ、ユーザーへのメッセージ、SEQ ID が掲載されている
- メッセージは以下のどちらかに分類（「メモの種類」）される：
 - INDIVIDUAL: インポートされた特定の配列に関連
 - GLOBAL: インポートされた全ての配列に影響する

インポートレポート(2)

| Type of Note | Data Element | Message Text | Detected Sequence |
|--------------|--------------|--|-------------------|
| INDIVIDUAL | <222> | No location information has been found for the feature SOURCE of SEQ ID NO 23. The user can add the location information as recommended in Annex VII, ST.26. | 23 |
| INDIVIDUAL | <222> | No location information has been found for the feature SOURCE of SEQ ID NO 24. The user can add the location information as recommended in Annex VII, ST.26. | 24 |
| INDIVIDUAL | <222> | No location information has been found for the feature SOURCE of SEQ ID NO 25. The user can add the location information as recommended in Annex VII, ST.26. | 25 |
| INDIVIDUAL | <222> | No location information has been found for the feature SOURCE of SEQ ID NO 26. The user can add the location | 26 |

データレポートの変更 (1)

- ST.25配列リストのインポート中に行われた変更の具体的な詳細
- ユーザーがこれらの詳細を提供することが期待されるインポートレポートとは対照的である
- オリジナルのST.25タグ、ターゲットST.26タグ、適用された変換と関連するSEQ IDを一覧表示する
- ただし、ここでの移行は元のコンテンツを変更しないためのものであり、たとえば、「u」が「t」に変更されてもST.26プロジェクトではまだウラシルを意味する

データレポートの変更(2)

Change Data

| Origin Tag | Origin Element Name | Origin Element Value | Target Element Name | Target Element Value | Transformation | Sequence ID Number |
|------------|---------------------|----------------------|---------------------|--------------------------|---|--------------------|
| <222> | Feature Location | | Feature Location | 1..15 | A feature location has been specified automatically since one was not provided. | 23 |
| <221> | Name/Key | | Feature Key | REGION | The custom feature key has been replaced with a recommended key (see Annex VII, ST.26). | 23 |
| <223> | Other information | | Qualifier Name | NOTE | A 'Note' qualifier has been created. | 23 |
| <223> | Other information | | Qualifier Value | Antibody Light Chain CDR | A value has been added to qualifier | 23 |


配列リストの検証

WIPO | Sequence DEMO PROJECT VERIFICATION REPORT FREE TEXT QUALIFIERS IMPORT REPORT DISPLAY THE SEQUENCE LISTING PREFERENCES ENGLISH [Back To List](#)

GENERAL INFORMATION SEQUENCES

DEMO PROJECT

[Print](#) [Export](#) [Import Another Project](#) [Validate](#) [Generate Sequence Listing](#)

| | | |
|---|--------------------------|---|
| Project Name Demo Project | Creation date 2019-02-21 |  |
| File Name | Sequences 36 | |
| Description This is a project for demonstration purposes of the manual. | Status new | |

検証レポート：エラーと警告

WIPO | Sequence
 INSECTICIDAL PROTEINS
VERIFICATION REPORT
FREE TEXT QUALIFIERS
IMPORT REPORT
DISPLAY THE SEQUENCE LISTING
PREFERENCES
ENGLISH ▼
Back To List

ERROR: After project verification, some errors or warnings have been detected. ✕

| Severity | Data Element | Message Text | Detected Value | Detected Sequence |
|----------|--------------------|--|-----------------|------------------------------|
| WARNING | Feature Qualifiers | Verify that the 'note' qualifier describes the 'OTHER' or 'other' value for the 'mod_base', 'ncRNA_class', or 'regulatory_class' qualifiers. | xyz | Sequence 392 |
| WARNING | Organism | The organism name has not been found in the list of predefined and custom organism names stored in this system. Suggestion: this organism may be added to the list of custom organism names. | Phytoplasma sp. | Sequence 394 |
| ERROR | Qualifier Value | The mandatory qualifier value is missing. | mol_type | Sequence 394 |

エラー/警告メッセージ

- 警告：無視できるが、手動レビューで対応する必要がある
- エラー：ユーザーが対応しなければならない
- エラー/警告の原因となった配列内の特定のコンポーネントへの検証レポートのリンク
- このエラーをレポートから削除するにはプロジェクトを再度検証する必要がある
- このツールにより検証レポートにおけるユーザーの進行状況を確認する

検証レポート: エラーなし



The screenshot displays a web application interface for sequence verification. At the top, a dark navigation bar contains the WIPO logo and several menu items: INSECTICIDAL PROTEINS, VERIFICATION REPORT (highlighted), FREE TEXT QUALIFIERS, IMPORT REPORT, DISPLAY THE SEQUENCE LISTING, HELP, PREFERENCES, and ENGLISH. A 'Return to project home' button is located in the top right corner. Below the navigation bar, a light blue success message reads: 'SUCCESS: The project has been successfully verified'. A larger light blue box below this message contains the text: 'Report successfully generated on 2021-04-08' and 'This project does not contain any errors or warnings.'

配列リストの検証 (デモ)

The screenshot displays the 'PROJECTS' section of the WIPO Sequence application. The header includes navigation links for PROJECTS, PERSONS & ORGANIZATIONS, and ORGANISMS, along with PREFERENCES and ENGLISH. A search bar is present with the text 'Search project by name'. Below the search bar is a table with the following data:

| Project name | Applicant file reference | Applicant name | Invention title | Status | Creation Date |
|---------------------------------------|--------------------------|----------------|-----------------|--------|---------------|
| Insecticidal Proteins | | | | new | 2019-05-09 |

Feature keyとQualifierの追加 (1)

▼ SEQUENCE 2

Sequence Number [ID] 2
Sequence Name Inserted sequence
Length 41

Molecule Type DNA
Organism Wohlfahrtiopsis bishoppi



▼ FEATURES

Add feature

| Feature Key | Location | Qualifiers |
|---------------|----------|---|
| <u>source</u> | 1..41 | mol_type = genomic DNA organism = Wohlfahrtiopsis bishoppi |



▼ SEQUENCE

gatagtatgt atatatagta gtatgatgat gatatgatga t

41

Feature keyとQualifierの追加(2)

▼ FEATURES

Add feature

| Feature Key | Location | Qualifiers | |
|---------------|----------|--|--|
| <u>source</u> | 1..23 | mol_type = genomic DNA organism = Tinamus osgoodi | |

1

Feature 1

| | | |
|--------------|---|-------------------|
| Feature Key* | ▼ | Feature Location* |
| D_segment | | 4..15 |

For a detailed explanation of the format of the feature location please [click here](#)

▼ QUALIFIERS



Add qualifier

Cancel Create Feature

Feature keyとQualifierの追加

▼ QUALIFIERS

Add qualifier

| | | | | |
|----------------|----------|-----------------|-----------------|---|
| Qualifier Name | mol_type | Qualifier Value | genomic DNA |  |
| Qualifier Name | organism | Qualifier Value | Tinamus osgoodi |  |

Qualifier Name

Qualifier Value

- cell_line
- cell_type
- chromosome
- clone
- clone_lib

Cancel Create Qualifier

FeatureまたはQualifierの追加（デモ）

WIPO | Sequence PROJECTS PERSONS & ORGANIZATIONS ORGANISMS PREFERENCES ENGLISH

NEW PROJECT IMPORT PROJECT IMPORT SEQUENCE LISTING VALIDATE SEQUENCE LISTING

PROJECTS

Search project by name

| Project name | Applicant file reference | Applicant name | Invention title | Status | Creation Date |
|---------------------------------------|--------------------------|----------------|-----------------|--------|---------------|
| Insecticidal Proteins | | | | new | 2019-05-09 |
| Optimal Soybean Loci | | | | new | 2019-05-09 |

許容Featureの位置(1)

■ ヌクレオチドおよびアミノ酸配列の位置記述子：

| 位置 | 構文 | 説明 |
|---|--------------------------------------|---|
| 単一残基番号 | x | 配列内の単一残基を指す |
| 配列長さを区切る 残基番号 | x..y | 開始残基と終了残基に縛られる、またはそれらを含む連続範囲の残基を指す |
| 最初に指定された 残基番号の前また は最後に指定され た残基番号より後 の残基 | <x >x <x..y x..>y <x..>y | 指定された残基または残基長さを含み、指定された残基を超えて拡張する領域を指す。「<」および「>」記号は、単一残基または残基長さの開始残基および終了残基と共に使用される |

許容Featureの位置(2)

■ ヌクレオチド配列のみの位置記述子

| 位置 | 構文 | 説明 |
|-------------------|-------|---|
| 隣接する2つのヌクレオチド間の位置 | x^y | 2つの隣接するヌクレオチド間の部位、例えば、エンドヌクレアーゼによる切断部位を指す。隣接するヌクレオチドの位置番号はカラット (^) で区切られる |

許容Featureの位置(3)

■ アミノ酸配列のみの位置記述子：

| 位置 | 構文 | 説明 |
|-------------------|------|--|
| 鎖内クロスリンクで結合した残基番号 | x..y | 「CROSSLNK」や「DISULFID」などの鎖内クロスリンクを示す機能とともに使用することで鎖内結合によって結合されたアミノ酸を指す |

複雑なFeatureの位置 (ヌクレオチド配列のみ)

| Location syntax | Location description |
|---|--|
| <code>join(location, location, ..., location)</code> | The indicated locations are joined (placed end-to-end) to form one contiguous sequence. |
| <code>order(location, location, ..., location)</code> | The elements are found in the specified order but nothing is implied about whether joining those elements is reasonable. |
| <code>complement(location)</code> | Indicates that the feature is located on the strand complementary to the sequence span specified by the location descriptor, when read in the 5' to 3' direction or in the direction that mimics the 5' to 3' direction. |

個人/法人

WIPO | ST26 Tool PROJECTS PERSONS & ORGANIZATIONS ORGANISMS PREFERENCES ENGLISH ▼

CREATE NEW PERSON OR ORGANIZATION

PERSONS & ORGANIZATIONS

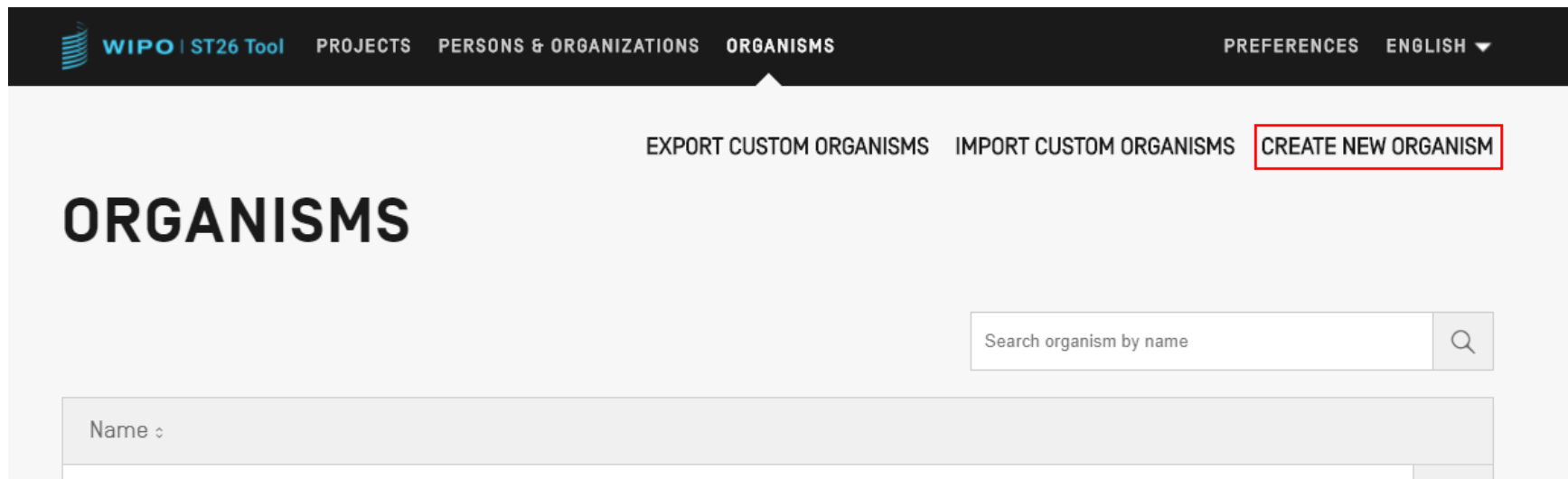
Search person or organization by name

| Name ◯ | Language Code ◯ | Name Latin ◯ | Residence Address ◯ | Correspondence Address ◯ |
|--------|-----------------|--------------|---------------------|--------------------------|
| | | | | |

WIPO | ST26 Tool CREATE NEW PERSON OR ORGANIZATION PREFERENCES ENGLISH ▼

| | |
|--|------------------------|
| Name* | Residence Address |
| Language* <input type="button" value="▼"/> | Correspondence Address |
| Name Latin | |

ユーザーの生物



The screenshot shows the 'ORGANISMS' section of the WIPO ST26 Tool. The top navigation bar includes 'WIPO | ST26 Tool', 'PROJECTS', 'PERSONS & ORGANIZATIONS', 'ORGANISMS', 'PREFERENCES', and 'ENGLISH'. Below the navigation bar, there are three buttons: 'EXPORT CUSTOM ORGANISMS', 'IMPORT CUSTOM ORGANISMS', and 'CREATE NEW ORGANISM' (highlighted with a red border). The main heading is 'ORGANISMS'. A search bar with the placeholder text 'Search organism by name' and a magnifying glass icon is present. Below the search bar is a large, empty table with a header row containing 'Name' and a dropdown arrow.

WIPO | ST26 Tool PROJECTS PERSONS & ORGANIZATIONS ORGANISMS PREFERENCES ENGLISH

EXPORT CUSTOM ORGANISMS IMPORT CUSTOM ORGANISMS **CREATE NEW ORGANISM**

ORGANISMS

Search organism by name

Name ▾

利用可能な言語 (1)

- WIPO Sequenceデスクトップツールでは全てのラベルおよび通知メッセージをPCTで使用されている10言語で提供している：
 - 英語、フランス語、スペイン語、アラブ語、ロシア語、中国語、ドイツ語、ポルトガル語、韓国語、日本語
- インターフェイスの言語は画面の右上隅で設定可能（次のページ参照）
- デフォルトのGUI言語は「システム環境設定」で設定可能
- 検証レポートもデフォルトの言語で作成される

利用可能な言語 (2)



WIPO | Sequence DEMONSTRATION PROJECT VERIFICATION REPORT FREE TEXT QUALIFIERS IMPORT REPORT DISPLAY THE SEQUENCE LISTING PREFERENCES ENGLISH Back To List

GENERAL INFORMATION SEQUENCES

DEMONSTRATION PROJECT

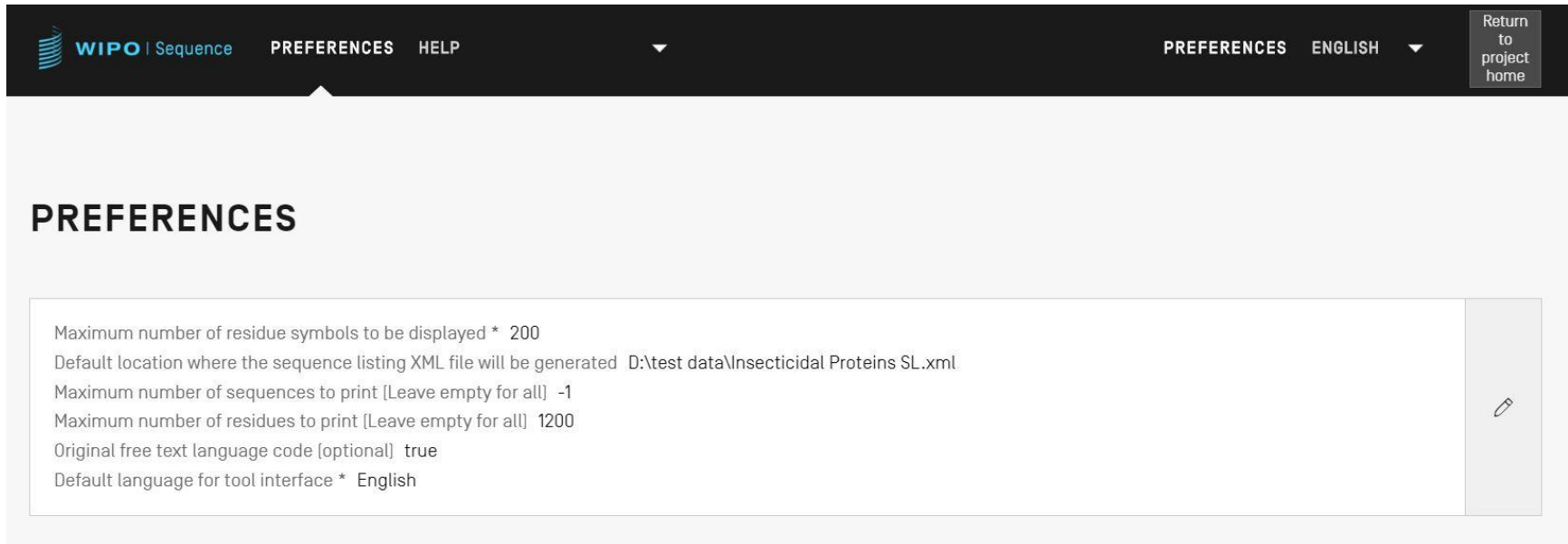
Print Export Import Another Project Validate **Generate Sequence Listing**

| | | |
|--|--------------------------|--|
| Project Name Demonstration Project | Creation date 2019-01-30 | |
| File Name Sequence-list-import | Sequences 6 | |
| Description This is a description for the project. | Status generated | |

▶ GENERAL INFORMATION

▶ SEQUENCES

システム環境設定の変更



The screenshot shows the 'PREFERENCES' page of the WIPO Sequence tool. The top navigation bar includes the WIPO logo, 'WIPO | Sequence', 'PREFERENCES', and 'HELP'. On the right, there are links for 'PREFERENCES', 'ENGLISH', and a 'Return to project home' button. The main content area is titled 'PREFERENCES' and contains a list of settings with their current values. A vertical edit icon is visible on the right side of the settings list.

PREFERENCES

- Maximum number of residue symbols to be displayed * 200
- Default location where the sequence listing XML file will be generated D:\test data\Insecticidal Proteins SL.xml
- Maximum number of sequences to print [Leave empty for all] -1
- Maximum number of residues to print [Leave empty for all] 1200
- Original free text language code (optional) true
- Default language for tool interface * English

フリーテキストQualifier：定義と使用

- フリーテキストとは「特定のQualifierの値形式の一種で、説明文の表現またはその他の指定された形式の形で表示される。」 – WIPO ST.26
- 2つの種類のうちの1つ：
 - 言語に依存（翻訳が必要な場合あり）例：note/NOTE
 - 言語に依存しない例：allele
- 1000文字以下でなければならない
- WIPO ST.26付録I 第6章および第8章：言語に依存するフリーテキストQualifier一覧を参照

フリーテキストQualifierの追加

WIPO | Sequence INSECTICIDAL PROTEINS VERIFICATION REPORT FREE TEXT QUALIFIERS IMPORT REPORT DISPLAY THE SEQUENCE LISTING HELP ▼ PREFERENCES ENGLISH ▼ Return to project home

For a detailed explanation of the format of the feature location please [click here](#)

▼ QUALIFIERS

Add qualifier

| | | |
|------------------|---|--|
| Qualifier Name * | ▼ | Qualifier Value |
| note | | |
| | | NOTE: this value may require translation for National/Regional procedures. |
| Language* | ▼ | Non English Qualifier Value |
| | | |

There is currently no Non English language code selected in your project. Please select one first.

Cancel Create Qualifier

Cancel Create Feature

フリーテキストQualifier : XLIFF

| Sequence ID Number | Sequence Name | Feature Key | Feature Location | Qualifier ID | Qualifier Name | Qualifier Value | Non English Qualifier Value-[fr] | Available language codes |
|--------------------|---------------------------|-------------|------------------|--------------|-----------------|---------------------|----------------------------------|--------------------------|
| 1 | Error four testing_seq_20 | SOURCE | 1..191 | q26 | <u>ORGANISM</u> | synthetic construct | | |
| 2 | Error four testing_seq_1 | source | 1..1004 | q5 | <u>organism</u> | unidentified | | |
| 3 | Error four testing_seq_2 | SOURCE | 1..191 | q6 | <u>ORGANISM</u> | unidentified | | |
| 4 | Error four testing_seq_3 | source | 1..1004 | q7 | <u>organism</u> | synthetic construct | | |
| 5 | Error four testing_seq_4 | SOURCE | 1..191 | q8 | <u>ORGANISM</u> | synthetic construct | | |

ST.26配列リストの作成

The screenshot displays the WIPO Sequence application interface. At the top, a dark navigation bar contains the WIPO logo and the text 'WIPO | Sequence'. To its right, a series of menu items are listed: 'DEMO PROJECT', 'VERIFICATION REPORT', 'FREE TEXT QUALIFIERS', 'IMPORT REPORT', 'DISPLAY THE SEQUENCE LISTING', 'PREFERENCES', and 'ENGLISH'. A 'Back To List' button is located in the top right corner of this bar.

Below the navigation bar, the page is divided into two tabs: 'GENERAL INFORMATION' and 'SEQUENCES'. The 'GENERAL INFORMATION' tab is active, showing the title 'DEMO PROJECT' in large, bold letters. To the right of the title are five buttons: 'Print', 'Export', 'Import Another Project', 'Validate', and 'Generate Sequence Listing'. The 'Generate Sequence Listing' button is highlighted with a red rectangular border.

Below the buttons, a table displays project details:

| | |
|--|--------------------------|
| Project Name Demo Project | Creation date 2019-02-21 |
| File Name | Sequences 36 |
| Description Th is is a project for demonstration purposes of the manual. | Status new |

An edit icon (pencil) is visible in the bottom right corner of the table area.

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE ST26SequenceListing PUBLIC "-//WIPO//DTD Sequence Listing 1.3//EN" "ST26SequenceListing_V1_3.dtd">
<ST26SequenceListing originalFreeTextLanguageCode="en" dtdVersion="V1_3" fileName="Insecticidal Proteins SL"
softwareName="WIPO Sequence" softwareVersion="1.1.0-beta.5" productionDate="2021-04-08">
  <ApplicationIdentification>
    <IPOfficeCode>IB</IPOfficeCode>
    <ApplicationNumberText>PCT/IB2021/000021</ApplicationNumberText>
    <FilingDate>2021-04-07</FilingDate>
  </ApplicationIdentification>
  <ApplicantFileReference>WIPO-Insect-Demo</ApplicantFileReference>
  <EarliestPriorityApplicationIdentification>
    <IPOfficeCode>IB</IPOfficeCode>
    <ApplicationNumberText>PCT/IB/2020/000045</ApplicationNumberText>
    <FilingDate>2020-04-06</FilingDate>
  </EarliestPriorityApplicationIdentification>
  <ApplicantName languageCode="en">Merck Sharpe and Dohme Corp.</ApplicantName>
  <InventionTitle languageCode="en">Insecticidal proteins and methods of their use</InventionTitle>
  <SequenceTotalQuantity>32</SequenceTotalQuantity>
  <SequenceData sequenceIDNumber="1">
    <INSDSeq>
      <INSDSeq_length>440</INSDSeq_length>
      <INSDSeq_moltype>AA</INSDSeq_moltype>
      <INSDSeq_division>PAT</INSDSeq_division>
      <INSDSeq_feature-table>
        <INSDFeature>
          <INSDFeature_key>SOURCE</INSDFeature_key>
          <INSDFeature_location>1..440</INSDFeature_location>
          <INSDFeature_qual>
            <INSDQualifier>
              <INSDQualifier_name>MOL_TYPE</INSDQualifier_name>
              <INSDQualifier_value>protein</INSDQualifier_value>
            </INSDQualifier>
            <INSDQualifier id="q84">
              <INSDQualifier_name>ORGANISM</INSDQualifier_name>
              <INSDQualifier_value>Homo sapiens</INSDQualifier_value>
            </INSDQualifier>
          </INSDFeature_qual>
        </INSDFeature>
      </INSDSeq_feature-table>
      <INSDSeq_sequence>

```

```

QVQLVESGGGVVQPGRSLRLDCKASGITFSNSGMHWVRQAPGKGLEWVAVIWDGSKRYIADSVKGRFTISRDNKNTLFLQMNSLRAEDTAVYYCATNDDYWGQGLVTVS
SNTKVDKRVESKYGPPCPPAPEFLGGPSVFLFPPKPKDITLMISRTPEVTCVVVDVDSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKC

```

人間が読める形式でST.26 SLを作成する： TXT

Sequence Listing Information:

DTD Version: V1_3

File Name: Insecticidal Proteins SL

Software Name: WIPO Sequence

Software Version: 1.1.0-beta.5

Production Date: 2021-04-08

General Information:

Current application / IP Office: IB

Current application / Application number: PCT/IB2021/000021

Current application / Filing date: 2021-04-07

Current application / Applicant file reference: WIPO-Insect-Demo

Earliest priority application / IP Office: IB

Earliest priority application / Application number: PCT/IB/2020/000045

Earliest priority application / Filing date: 2020-04-06

Applicant name: Merck Sharpe and Dohme Corp.

Applicant name / Language: en

Invention title: Insecticidal proteins and methods of their use (en)

Sequence Total Quantity: 32

Sequences:

Sequence Number (ID): 1

Length: 440

Molecule Type: AA

Features Location/Qualifiers:

- SOURCE, 1..440

> MOL_TYPE, protein

> ORGANISM, Homo sapiens

人間が読める形式でST.26 SLを作成する： HTML

Sequence Listing

Sequence Listing Information

| | |
|-------------------------|--------------------------|
| File Name | Insecticidal Proteins SL |
| DTD Version | V1_3 |
| Software Name | WIPO Sequence |
| Software Version | 1.1.0-beta.5 |
| Production Date | 2021-04-08 |

General Information

| | |
|--|---|
| Current application: IP Office | IB |
| Current application: Application number | PCT/IB2021/000021 |
| Current application: Filing date | 2021-04-07 |
| Current application: Applicant file reference | WIPO-Insect-Demo |
| Earliest priority application: IP Office | IB |
| Earliest priority application: Application number | PCT/IB/2020/000045 |
| Earliest priority application: Filing date | 2020-04-06 |
| Applicant name | Merck Sharpe and Dohme Corp. |
| Applicant name: Language | en |
| Applicant name: Name Latin | |
| Inventor name | |
| Inventor name: Language | |
| Inventor name: Name Latin | |
| Invention title | Insecticidal proteins and methods of their use (en) |
| Sequence Total Quantity | 32 |

Sequences

| | |
|-----------------------------|-----|
| Sequence Number [ID] | 1 |
| Molecule Type | AA |
| Length | 440 |

Features Location/Qualifiers

SOURCE 1..440
 /MOL_TYPE= protein
 /ORGANISM= Homo sapiens

Residues

参考資料

- WIPO標準ST.26 :

<https://www.wipo.int/export/sites/www/standards/en/pdf/03-26-01.pdf>

- WIPO Sequence ホームページ :

<https://www.wipo.int/standards/en/sequence>

質疑応答