User Documentation for Korean Nucleotide Archive (KoNA)

July 27, 2023

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1. INTRODUCTION

1.1. About KoNA

Korean Nucleotide Archive (KoNA) is a repository for NGS data. Its metadata model is equivalent to those established by the International Nucleotide Sequence Data Collaboration (INSDC), in which all the attributes are categorized into four objects: BioProject, BioSample, Experiment, and Run. To deposit data to KoNA, the metadata should be submitted to the KoNA website, whereas the raw sequence data should be submitted through a high-speed data transmission system called GBox.

When you cite your submitted data in your article, you can do so by citing the BioProject accession ID, for example:

"The data for this study have been deposited in the Korean Nucleotide Archive (KoNA) under accession number KAPxxxxxx.".

If you need help in using KoNA, please send your inquiry to <u>data@kobic.kr</u>.

1.2. Data model



In the data model of KoNA, attributes are categorized into four basic objects:

- 1. BioProject object with KAP prefix (e.g., KAP210001), which contains information of a study
- 2. BioSample object with KAS prefix (e.g., KAS21000001), which contains information of samples used in the sequencing experiment
- 3. Experiment object with KAE prefix (e.g., KAE21000001), which contains information of instrument and library
- 4. Run object with KAR prefix (e.g., KAR21000001), which is a manifest of data files

In addition, we denote a group of BioSamples as BioSample Group with KASG prefix (e.g., KASG210001) to manage and present relevant BioSamples in the system for user convenience. We issue an accession ID for a group of Experiments and Runs annotated in one submission batch (i.e., "Submission" object with KAD prefix; e.g., KAD2100001). Related BioProject entries can also be combined into an umbrella BioProject with KAU prefix (e.g., KAU20000).

2. DATA SUBMISSION

2.1. Submission overview

Submission is done in the following steps.

- 1. Log-in to your account. If you do not yet have an account, create one.
- 2. Input your data
 - Subimit BioProject metadata on the KoNA website
 - Submit BioSample metadata on the KoNA website
 - Submit NGS raw data file with GBox
 - Submit NGS metadata on the KoNA website

Once the submission is complete, we will check the completeness of the submission. If the submission is found to be complete, we will issue accession IDs and release the data when the user-specified release date arrives.

If the submission is found to be needing an edit, we will request what to update by emails.

2.2. Create an account

1. Click Sign-up at the top right of the main page.

| Small | | | Sign in | Sign up • | ■・企 |
|-------|--------|--------|------------|-----------|-----|
| About | Submit | Browse | Statistics | | |

2. Select the one on the right.



3. Fill out the form and click Confirm.

| Sign up | 01 Agree 02 Enter info 03 Done |
|---|---|
| Enter a personal information | (*Required |
| First Name * | Last Name * |
| ID * | Duplication Check |
| ① 4~12 character-long. Only alphabets, numbers, special character | _are allowed. |
| Password * | Confirm Password * |
| 8~20 character-long. Uppercase and lowercase are distinguished. | Must contain at least a number and a special character. |
| E-mail * | Duplication Check |
| Institution * | Department or divistion |
| Country * Select a country | • |
| Please select your nationality. | |
| Cancel | Confirm |

4. Check your e-mail and activate your account. Then log-in.



2.3. Submit BioProject

On the top menu, select Submit \rightarrow Submit BioProject and click Create.

| | | Submit BioProject | | | | | | | |
|---|---|--|--|---|--------------------------------|--|--|--|--|
| | ••• | | | | | | | | |
| Total : 1 Submit | A BioProject A Biol / Page 1 0 Return 0 Approval | is a collection of biological data related to a single initiative originatin Project record provides users a single place to find links to the diverse The KoNA BioProject issues accession numbers with the prefix 'KA 0 | g from a single orga data types generate P' to the submitted | nization or a c ed for that pro projects. | :onsortium. ject. Create | | | | |
| NO BioProject Accession ID Project Title Registration Date Status Operation | | | | | | | | | |
| 1 | KAP230591 | - | - | Writing | Edit Delete | | | | |

On the resulting screen, fill out the form, which consists of four parts: Submitter, Project Design, Hierarchy, and Publications.

Fields in red font with asterisk (e.g., Name *) are mandatory whereas those in black font without asterisk (e.g., NTIS Number) are optional. Most of the fields should be straightforward from the fields name to see what to fill out. For several fields that need explanation, their descriptions are written in the form.

After filling out all necessary fields, click Save and Submit to complete your BioProject submission.

2.4. Submit BioSample

On the top menu, select Submit \rightarrow Submit BioSample and click Create.

| | Submit BioSample | | | | | | | | | |
|---------|---|--|---|--|---|--|--|--|--|--|
| | ••• | | | | | | | | | |
| The K | BioSamı The BioSamp CoNA BioSample issue: | ole is a sample reposit le is also being develc BioProjec s accession numbers v | ory where you can search, su oped to capture descriptive ir t and BioSample records link vith the prefix 'KAS' to the su | ubmit and curate sample met nformation about the biologic to corresponding data store bmitted sample(s), and with | adata used ir cal samples ir d in KoNA. the prefix "K/ | n various pr nvestigated ASG" to the | ojects. in projects. submitted sample group. | | | |
| Total∶0 | / Page 0 | | | | | | | | | |
| Submit | 0 Return 0 Approval | 0 | | | | | Create | | | |
| NO | Sample Group Accession ID | BioProject Accession ID | Sample Title | Organism | Release Date | Status | Operation | | | |
| | | | No | Data | | | | | | |

In the resulting screen, you first need to import the BioProject that you submitted. To

| | Submit BioSample |
|---------------------------|---|
| | ••• |
| | Please fill the below fields to describe your BioSamples. |
| | |
| | Required * / Conditionally required * |
| | |
| Hierarchy | |
| BioProject Accession ID * | Search |

do so, click Search at the first field (BioProject Accession ID).

In the resulting screen, tick the radio button of the BioProject and click Select.

| Project ac | cession | |
|------------|---------------|-------------------|
| | | |
| Select | Project title | Registration date |
| 0 | Test | - |
| | | |
| | | |
| | | |
| | Select | |

Then, the BioProject ID should have been filled out in the form as shown below.

| Hierarchy | | |
|---------------------------|-----------|--------|
| BioProject Accession ID * | KAP230599 | Search |

Thereafter, most of the fields should be straightforward from the fields name to see what to fill out. For several fields that need explanation, their descriptions are written in the form.

For the Sample Data Input Type field, choose either Direct Input or File Upload.

| Sample Data Input Type * | Direct Input ~ |
|--------------------------|----------------|
| | Direct Input |
| | File Upload |

- Direct Input: To fill out sample attribute information directly from the screen using the SpreadJS implementation. This option is recommended if you are not experienced in BioSample submission, or if you do not have many samples.
- File Upload: To download spreadsheet file, fill out sample attribute information on the file, then upload the file. This option is recommended if you have many samples.

In either case, whether an attribute field is mandatory or optional can be seen as colors in the corresponding column in the spreadsheet:

| | А | В | С | D | E | F | G | н | I | J | K | L | M | N | |
|------|----------------------|----------|--------|----------|---------|--------------------|------------------|-----------------------------|--------------|-----------------|---------------|-----------------|------------------|---------|-----|
| 1 | 1.Name / Designation | | | | | | 2.Sample history | | | | | 3 | | | |
| 2 | Sample name | Organism | Strain | Subgroup | Subtype | Culture collection | Specimen voucher | Biological replicate | Collected by | Collection date | Identified by | Passage history | Isolation source | Isolate | Geo |
| 3 | M | M | 0 | 0 | 0 | 0 | 0 | 0 | М | M | 0 | 0 | M | 0 | |
| 10 | | | | | | | | | | | | | | | |
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| 4 | | | | | | | | | | | | | | | F |

- Green: Mandatory field (M)
- Yellow: Optional field (O)

There are many attribute fields. Whether an attribute field is mandatory, optional, or not applicable depends on what you selected at the Sample Type field, which is called the "sample package" in NCBI and DDBJ, or "checklist" in EBI.

| Sample Type * | Select appropriate types that best describes your samples : |
|---------------|--|
| | Clinical or host-associated, pathogen |
| | Environmental, food or other pathogen |
| | \bigcirc Microbe : includes bacteria or other unicellular microbes that are not appropriate to to Pathogen or Virus types. |
| | 🔿 Model organism or animal sample : includes multicellular samples or cell lines derived from common laboratory model organisms. |
| | 🔿 Human sample |
| | ○ Plant sample : includes any plant sample or cell line. |
| | 🔿 Virus sample |

Description of each attribute field is shown on the screen when you chose the File Upload option.

| Fields | Description |
|---------------|--|
| Sample name * | A name that you choose for the sample. It can have any for mat, but we suggest that you make it concise, unique and c onsistent within your lab, and as informative as possible. E very Sample Name from a single Submitter must be uniqu e. |
| Organism * | The most descriptive organism name for this sample (to the species, if relevant) |
| Strain | microbial or eukaryotic strain name, number or designation |
| Subgroup | Taxonomy below subspecies; sometimes used in viruses to denote subgroups taken from a single isolate |
| Subtype | Used as classifier in viruses (e.g. HIV type 1, Group M, Subty pe A) |

After filling out the spreadsheet form, click Save and Submit at the bottom of the web page.

2.5. Upload NGS raw data file with GBox

To upload NGS raw data file, you need to download GBox first, a high-speed file transfer system.

In the middle of the KoNA main page, there is a link GBox Downloads.



If you expand GBox Downloads, there is a list of GBox implementations for Windows, Mac, and Linux. CLI stands for command line interface version. The entries without CLI are graphical user interface (GUI) versions.



The following is based on Windows GUI version. When the GBox download is completed, unzip the download, find the executable and start it up.



A log-in windows will appear. Here, you log-in with the account information that you entered when you signed up for KoNA.

| Single sign-on for |
|---|
| Starts the GBox Workbench. |
| |
| Password |
| Forgotten ID/Password? |
| Login |
| Cancel |
| Not register yet? <u>Create Account</u> Go Bio-Express Service ☑ |

Upon log-in, the GBox interface comes up, and you can simply upload your NGS data file from your local PC to KoNA by dragging the file from the File Explorer pane to the GBox Explorer pane.

| GBox Workbench 2.0 | | | | | | | | - 🗆 | × |
|----------------------|--------------|------------------|--------------|--|------|-----------------|---------------|--|---------|
| File Help Run | | 1 | | | | 1 | | | |
| 🛱 File Browser C 🗖 🗖 | 🗟 File Explo | rer | n < | $\leftrightarrow \rightarrow \wedge \circ \Box \Box$ | GE | Box Explorer | | $\mathbf{n} \leftarrow \rightarrow \uparrow$ | C - E |
| > <mark>.</mark> C:₩ | C:₩Users₩0 | CEO₩Desktop₩GBox | .workbench-w | /indows-x86_€ ~ | /sw | hwang10 | | | \sim |
| > _ D:₩ | Name | Size | | Туре | Nar | me | Size | | Туре |
| > G:₩ | GBox.exe | 531 | .2 KB | EXE | K | oNA | 0 B | | NA |
| | GBox.ini | 292 | В | INI | T | EMP | 0 B | | NA |
| | GBoxc.ex | e 236 | 2 KB | EXE | 🔜 ir | nput | 0 B | | NA |
| | artifacts. | kml 42.5 | KB | XML | | | | | |
| | 📙 configura | ation 4.1 | KB | | | | | | |
| | eatures | 4.1 | KB | | | | | | |
| | 📕 jdk-11.0. | 18 4.1 | KB | 18 | | | | | |
| | p2 4.1 | | 1 KB | | | | | | |
| | 📙 plugins | 98.3 | KB | | | | | | |
| GBox Browser 🗖 🗖 | 🗌 🔤 workspac | ce 0 B | | | | | | | |
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| > KoNA | | | | | | | | | |
| > 📙 TEMP | < | | | > | < | | | | > |
| | S Monitor | GBox Transfer Mc | nitor 💷 Cons | ole | | | | ¢þ | C - 0 |
| | Server ID | Server Name | State | Connection | S | ession Time | Duration Time | Total Ses | sion Co |
| | KBDS-1 | Raonwiz-Server | Stable | Connected | 2 | 2023-07-27 02:5 | 1m | 66 | |
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Important: There should be no space, special characters except underbar, and no non-English alphabet characters in the file name itself as well as in the path at your local PC. Otherwise, uploading to GBox will fail. For example, if your data file is named as experiment 1.fq.gz, uploading will fail because there is a space in the filename. You should rename it as experiment_1.fq.gz. Likewise, if the file experiment_1.fq.gz is in the folder name C:\\My data\, uploading will fail because there is a space in the folder name. You should rename it as C:\\My_data\.

2.6. Submit NGS data

On the top menu, select Submit \rightarrow Submit KAD and click Create.

| | Submit KAD | | | | | | | | | | | |
|---------|---|------------------------------|---------------------|-----------------|-------------------|----------|--------|-----------|--|--|--|--|
| | ••• | | | | | | | | | | | |
| | The Korean Read Archive (KAD) is a data repository for collecting, archiving, managing, and sharing raw NGS sequence data. The KAD is the first repository of genome sequence data with international journal recognition in Korea. Before creating a new KAD submission, you must create a BioProject and BioSample(s). If you have any questions or would like to give us any suggestions/comments or report a bug, please feel free to contact us: data@kobic.re.kr | | | | | | | | | | | |
| Total:0 | / Page 1 | | | | | | | | | | | |
| Submit | 0 Return 0 App | proval 0 | | | | | | Create | | | | |
| NO | BioProject Accession ID | Sample Group Accession ID | KAD Accession ID | Submission Date | Registration Date | Reviewer | Status | Operation | | | | |
| | No Data | | | | | | | | | | | |

In the resulting screen, you first need to import the BioProject and BioSample that you submitted. To do so, click Search at the first field (BioProject Accession ID) and at the first field (BioSample Group Accession).

| BioProject Accession ID * | Open Select the Project ID related to the sample. Link data to BioProject that describes the research |
|-----------------------------|---|
| BioSample Group Accession * | Open Enter a BioSample or KAD Sample Accession. BioSample accessions have 'root' prefix. KAD Sample Accessions have 'KRS' prefix. A BioSample describes the biological source material for your sequence library preparation. |

In the resulting screen, tick the radio button of the BioProject and click Select, and the radio button of the BioProject and click Select as well.

Then, the two fields should have been filled out in the form as shown below.

| BioProject Accession ID * | KAP230599 Select the Project ID related to the sample. Link data to BioProjection Select the research |
|-----------------------------|--|
| BioSample Group Accession * | KASG231018 Open Enter a BioSample or KAD Sample Accession. BioSample accessions have 'KRS' prefix. A BioSample describes the biological source material for your sequence library preparation. |

For the input type field, choose either Direct Input or File Upload.

| input type * | | Direct Input | \sim |
|--------------|---|--------------|--------|
| | _ | Direct Input | - |
| | | File Upload | |

- Direct Input: To fill out NGS metadata directly from the screen using the SpreadJS implementation. This option is recommended if you are not experienced in NGS data submission, or if you do not have many data files.
- File Upload: To download spreadsheet file, fill out NGS metadata on the file, then upload the file. This option is recommended if you have many data files.

In either case, whether a metadata field is mandatory or optional can be seen as colors in the corresponding column in the spreadsheet:

| | А | В | С | D | E | F | G | Н | 1 | J | К | L | |
|----|-------------|------------------|--------------|------------------|----------|--|---------|----------|--------|-----------|---------------------|------------------------|----------|
| 1 | | | Experiment | | | | | | | | | | |
| 2 | | | | | | Experiment Design | | | | | | | |
| 3 | Sample name | Experiment title | Library name | Instrument model | Platform | Library Construction/Experiment Desigr | Library | Strategy | Source | Selection | General description | Fragment/Paired read I | ns |
| 4 | M | M | M | М | М | М | 0 | M | М | М | 0 | 0 | |
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| 18 | | | | | | | | | | | | | _ |
| • | | | | | | | | | | | | | <u>}</u> |
| | | | | | | | | | | | | | |

- Red: Mandatory field (M)
- Ivory: Optional field (O)

Description of each field is shown on the screen when you chose the File Upload option.

| Field | Description |
|--|---|
| Sample name * | A name that you choose for the sample. It can have any format, but we sugges t that you make it concise, unique and consistent within your lab, and as infor mative as possible. Every Sample Name from a single Submitter must be uniq ue. |
| Experiment title (English) * | "Experiment title. Short description that will identify the dataset on public pag es. A clear and concise formula for the title would be like:{methodology} of {or ganism}: {sample info} (e.g. ""RNA-Seq of Mus musculus: adult female splee n"")" |
| Experiment title (Korean) * | 데이터베이스 공개 페이지에서 나타낼 실험 제목. 제목에 종을 포함한 샘플의 실험 정보와 사용한 시퀀싱 타입을 간략히 표현하는 것을 추천함. (예시: "성체 쥐의 비장에 대한 RNA- Seq") |
| Library name * | Short unique identifier for the sequencing library. Each library name MUST be unique! (Exception: libraries of the technical replicates are allowed to have the same library name) |
| Platform * | part of Instrument model of Sequencing Platform |
| Instrument model * | Sequencing platform 중 Instrument model 부분 |
| Library Construction/Experime nt Design * | Enter the details about your experimental design and molecular strategies including hybrid selection and affinity capture reagents; any detail that distinguis hes your experiment from other similar experiments. This field should describe: the protocols used to extract and prepare the material to be sequenced the library construction protocol name of the library preparation kit |

To the last three fields in the spreadsheet (READ 1, READ 2, OTHER), fill out the path to the file that you uploaded by GBox. To get the path to the file, right click the file in the GBox and select Path Copy. The path will look something like

| GBox Work | bench 2.0 | | | | | | _ | | × |
|------------------------|--|----------|---|----------------|---------------|-------|----------|--------------------------------|--------|
| File Help Run | 1 | | | | | | | | |
| 🛱 Fil 🗖 🗖 | 🗟 File Explorer | A | $\leftarrow \rightarrow \land \complement \square \blacksquare$ | GBox Explore | er | | A | $\leftarrow \rightarrow \land$ | C - 0 |
| C | D:₩ | | ~ | /swhwang10 | | | | | \sim |
| > <mark>.</mark> C:₩ ^ | Name | Size | Туре ^ | Name | | Size | | Туре | |
| | 🕼 PPT template.pptx | 1.4 MB | PPT) | 🖶 A1_1.fastq.g | | oad | | gz | |
| | <mark>.</mark> R_2019_원내 | 8.2 KB | | - KoNA | ▲ Down New | oau > | | NA | |
| > 1 | <mark></mark> R_2019_원외 | 12.3 KB | | E TEMP | ⊐ Renam | ie . | | NA | |
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| > 2 | <mark>- R_</mark> 42회KOBIC교육2019 | 8.2 KB | | | Paste | | | | |
| > 2. | 📙 Ryu-Mouse RNA-Seq | 4.1 KB | | | 🕱 Delete | | | | |
| > 2. | Stuffs-Rarely updated | 0 B | ~ | | 🗐 Path C | ναο | | | |
| > 🔒 3- | C 2010 C 100 C | | > | < | C Path (| Copy | | | > |
| > 📙 4- | | | | | | | | ×. | |
| > 5. | 🖆 Monitor 🗟 Progress 🗳 🤅 | Console | | | | | | × | 8 1 |

/john_smith/A1_1.fastq.gz.

After filling out the spreadsheet form, click Save and Submit at the bottom of the web page.

2.7. Manage my submission at MyPage

| | | | | | ń | | | | LOGOUT • MyPage • Admin • | ≡· ŵ |
|-------------|--------------|--|------|--------------------|--------|---|--------|---|---------------------------|------|
| About | | | Subm | nit | | | Browse | | Statistics | |
| KoNA SEARCH | Please enter | | | nter a search term | | | | ۹ |]/ | |
| - | | | | IO | Search | a | | | | |

You can check the status of your submission at MyPage in the top right.

The status of your submission can be Writing, Submit, Return, Approval. The status right after submission would be Submit. If we find the submission incomplete, the status will change to Return, and you need to update your submission as written in the instruction that we will send you. If the submission is right, the status will change to Approval.

| | MyPage | |
|---|--|---------|
| Hello, <u>ymsim</u> Thank you for visiting KoNA. | You can move directly through the main menu. | My Info |
| Registered Assignments | | |
| BioProject | All 0 Writing 0 Submit 0 Return 0 Approval 0 | |
| BioSample | All 0 Writing 0 Submit 0 Return 0 Approval 0 | |
| KRA | All 0 Writing 0 Submit 0 Return 0 Approval 0 | |
| Data Request | | |
| KRA | All 0 Submit 0 Return 0 Approval 0 | |
| Reviewer | All 0 Approval 0 Destruct 0 | |

3. SEARCH AND DOWNLOAD

3.1. Search and browse

You can search for keyword or accession ID at the search bar in the main page.

| About | | | Subn | nit | | | Browse | | Statistics |
|-------------|--------------|------------|---------------|---------|-----|-----|-------------|-------------|------------|
| KoNA SEARCH | | Please ent | er a search t | term | | | | 9 | 1/ |
| | Top Searched | | | | | | | | |
| | cancer | lung | mouse | RNA-seq | WXS | WGS | METAGENOMIC | Single cell | |

You can also search at the search bar in all other pages.

|) Please | Q | | | | | | | |
|----------|------|-------|---------|-----|-----|-------------|-------------|--|
| cancer | lung | mouse | RNA-seq | WXS | WGS | METAGENOMIC | Single cell | |

You can browse BioProject entries at Browse \rightarrow BioProject menu.

| | | Brows | se BioPro | oject | | | | | | | | |
|----|---|--|---------------------|---|------------------------|--|--|--|--|--|--|--|
| | ••• | | | | | | | | | | | |
| | A BioProject is a collection of biological data related to a single initiative originating from a single organization or a consortium. A BioProject record provides users a single place to find links to the diverse data types generated for that project. The KoNA BioProject issues accession numbers with the prefix 'KAP' to the submitted projects. There are a total of 462 data registered in the " BioProject" | | | | | | | | | | | |
| NO | BioProject ▲ Accession ID ▼ | Project Title | Sample A Scope V | Project Data Type | Registration Date ▼ | | | | | | | |
| 1 | KAP210106 | Construction of next generation sequencing system center | Monoisolate | Transcriptome or Gene Expression | 2021-11-25 | | | | | | | |
| 2 | KAP230581 | Multifaceted roles of retrotransposon-fusion RNAs | Multiisolate | Whole Genome sequencing, Epigenomics, Transcriptome | 2023-05-09 | | | | | | | |

3.2. Download

The following is an example of the accession ID KAD2200955, which is available at https://www.kobic.re.kr/kona/search_kra?bioproject_id=KAP220490&sample_group_id=KASG220880&kra_id=KAD2200955.

At the bottom of that page, there are links for download. By clicking the link Download Excel, you can download the metadata as a spreadsheet file. You do not need to log-in for this download.

| | A | В | С | D | E | F | G | Н | 1 | J | К | L | |
|----|-------------|----------------------|----------------|--------------------|----------|--|---------|-----------|--------|-------------|---------------------|----------------------|---|
| 1 | | Experiment | | | | | | | | eriment | | | |
| 2 | | | | | | Experiment Design | | | | | | | |
| 3 | Sample name | Experiment title | Library name | nstrument model | Platform | Library Construction/Experiment Design | Library | Strategy | Source | e Selection | General description | Fragment/Paired read | |
| 4 | M | М | М | М | М | М | 0 | М | M | М | 0 | 0 | |
| 17 | TN1510R043 | Primate addictio | TN1510R043 | llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
| 18 | TN1510R043 | Primate addictio | TN1510R043(| llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
| 19 | TN1510R043 | Primate addictio | TN1510R043 | llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
| 20 | TN1510R043 | Primate addictio | TN1510R043 | llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
| 21 | TN1510R043 | Primate addictio | TN1510R0439 | llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
| 22 | TN1510R044 | Primate addictio | TN1510R044(I | llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
| 23 | TN1510R044 | 1Primate addictio | TN1510R044 | llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
| 24 | TN1510R044 | 2Primate addictio | TN1510R044.1 | llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
| 25 | TN1510R044 | Primate addictio | TN1510R044 | llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
| 26 | TN1510R044 | Primate addictio | TN1510R044 | llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
| 27 | TN1510R044 | Primate addictio | TN1510R044 | llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
| 28 | TN1510R044 | Primate addictio | TN1510R044(I | llumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | CDNA | | Paired-end | |
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| 30 | TN1510R044 | Primate addictio | TN1510R0441 | llumina HiSea 300 | IT UMIN | TruSea Stranded mRNA sample prep kit | | RNA-Sec | TRAN | 6 CDNA | | Paired-end | Ŧ |
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| 17 | TN1510R0435 | Primate addictio | TN1510R043 | Illumina HiSeq 300 | ILLUMIN, | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
| 18 | TN1510R0436 | Primate addictio | TN1510R043 | Illumina HiSeq 300 | ILLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
| 19 | TN1510R0437 | Primate addictio | TN1510R043 | Illumina HiSeq 300 | ILLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
| 20 | TN1510R0438 | Primate addictio | TN1510R043 | Illumina HiSeq 300 | ILLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
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| 22 | TN1510R0440 | Primate addictio | TN1510R0440 | Illumina HiSeq 300 | ILLUMIN, | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
| 23 | TN1510R0441 | Primate addictio | TN1510R044 | Illumina HiSeq 300 | ILLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
| 24 | TN1510R0442 | Primate addictio | TN1510R044 | Illumina HiSeq 300 | ILLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
| 25 | TN1510R0443 | Primate addictio | TN1510R044 | Illumina HiSeq 300 | ILLUMIN, | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
| 26 | TN1510R0444 | Primate addictio | TN1510R044 | Illumina HiSeq 300 | ILLUMIN, | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
| 27 | TN1510R0445 | Primate addictio | TN1510R044 | Illumina HiSeq 300 | ILLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
| 28 | TN1510R0446 | Primate addictio | TN1510R044 | Illumina HiSeq 300 | ILLUMIN, | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
| 29 | TN1510R0447 | Primate addictio | TN1510R044 | Illumina HiSeq 300 | ILLUMIN, | TruSeq Stranded mRNA sample prep kit | | RNA-SecT | RANS | DNA | | Paired-end | |
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| 2 | | Experiment Design | | | | | | | | | | | |
| 3 | Sample name | Experiment title | Library name | Instrument model | Platform | Library Construction/Experiment Design | Library | Strategy | Source | Selection | General description | Fragment/Paired read | |
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| 19 | TN1510R0437 | Primate addictio | TN1510R043 | Illumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | DNA | | Paired-end | |
| 20 | TN1510R0438 | Primate addictio | TN1510R043 | Illumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | DNA | | Paired-end | |
| 21 | TN1510R0439 | Primate addictio | TN1510R043 | Illumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | DNA | | Paired-end | |
| 22 | TN1510R0440 | Primate addictio | TN1510R0440 | Illumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | DNA | | Paired-end | |
| 23 | TN1510R0441 | Primate addictio | TN1510R044 | Illumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | DNA | | Paired-end | |
| 24 | TN1510R0442 | Primate addictio | TN1510R044: | Illumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | DNA | | Paired-end | |
| 25 | TN1510R0443 | Primate addictio | TN1510R044 | Illumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | DNA | | Paired-end | |
| 26 | TN1510R0444 | Primate addictio | TN1510R044 | Illumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | DNA | | Paired-end | |
| 27 | TN1510R0445 | Primate addictio | TN1510R044 | Illumina HiSeq 300 | LLUMIN | TruSeq Stranded mRNA sample prep kit | | RNA-Sec | TRANS | DNA | | Paired-end | |
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Shortly, you will receive an e-mail informing that the raw data files were copied to your GBox user space.



From GBox Explorer pane in GBox application, you will see a folder KONA has been automatically created.

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You can just download them by dragging them from GBox Explorer pane to File Explorer pane.

4. FAQ

Q: How many samples and experiments do I need?

A: You may have more than one experiment per samples. SAMPLE is a record of biological isolate with unique physical properties. EXPERIMENT is a unique sequencing result for a specific sample. In the KoNA Metadata template, EXPERIMENT is represented by a combination of library + strategy + layout + instrument model and corresponds to one row in the table.

Q: What KoNA accession do I use for my publication and where can I find it?

A: We recommend using the BioProject accession (KAP#) in publications. A BioProject is an entry point for all data submitted for a given study. Each BioProject can be associated with more than one submission in KoNA. After you have successfully completed your submission, we will send an email notification with the BioProject accession.

Q: My manuscript reviewer is requesting a link to my submission. How do I get one?A: Log in and go to the MyPage. Find the BioProject of interest and click "Reviewer link".

Q: How do I create more than one EXPERIMENT (library/replicate) per SAMPLE for the KAD submission ?

A: Each row in the KAD metadata template represents one EXPERIMENT. Simply use the same BioSample accession or name (depending on the template) in rows (EXPERIMENTs) that you want to associate with this sample.

Q: How do I create more than one RUN per EXPERIMENT?

A: Only one RUN per EXPERIMENT is allowed for KRA submission. When libraries are indeed identical (i.e., same combination of library + strategy + layout + instrument model), all files should be placed in the same RUN. To do this, simply enter the file names consecutively in the same row.

Q: How do I delete my submission?

A: To delete KoNA submissions, contact KoNA staff for assistance at <u>data@kobic.kr</u> and provide an ID and a reason.

Q: How do I add more samples to my KAD submission?

A: KAD Submission is a discrete act of depositing data (transaction). You cannot add data to a KAD after corresponding KAD accession ID has been issued. Instead, you need to add new samples and new KoNA data and/or new KoNA data to existing samples to a BioProject. BioProject serves as an entry point for all data submitted for a given research project. In order to update your BioProject with new samples and/or KoNA data you should create a new submission where you provide the BioProject accession (KAP#) of the project you want to update

Q: How do I change the release date of my KoNA submission?

A: Please contact KoNA staff for assistance at data@kobic.kr.

Q: How do I improve/correct my metadata after submitting?

A: Only KoNA staff can correct the metadata after an accession ID is issued. Please contact KoNA staff for assistance at <u>data@kobic.kr</u>.

Q: How do I rename my EXPERIMENT/RUN?

A: Name of EXPERIMENT and RUN cannot be changed.

Q: How do I change the PLATFORM in my EXPERIMENT?

A: Please contact KoNA staff for assistance at data@kobic.kr.

Q: How do I link an EXPERIMENT to a different SAMPLE?

A: Only KoNA staff can correct the metadata after an accession ID is issued. Please contact KoNA staff for assistance at <u>data@kobic.kr</u>.

Q: How do I link a RUN to a different EXPERIMENT?

A: Only KoNA staff can correct the metadata after an accession ID is issued. Please contact KoNA staff for assistance at <u>data@kobic.kr</u>.