

Reservation service is available for INSDC members.

URL: <http://www.ncbi.nlm.nih.gov/projects/bpws/>

Credentials: the same as used for Genome Project submission web service.

General reservation process

INSDC member may reserve locus tag prefix for future project submission. Reservation ensures that other INSDC members or non-INSDC submitters cannot submit project with this prefix.

If prefix was reserved, you can later submit project with this prefix. NCBI does not assign reserved prefix to specific project until project submitted. At the submission time NCBI checks whether prefix in submitted project is available or was previously reserved by the same INSDC member. INSDC member should track usage of reserved prefixes and submit projects with prefixes from reserved pool. NCBI will not accept project submission with duplicated prefix.

NCBI may assign automatically generated locus tag prefix if submitter does not request specific prefix. To do that submitter should include prefix "AUTO" in the project core XML. Reservation does not required in this case.

Checking prefix availability

Check should be performed with request **GET**.

The following parameters are required:

- operation=check
- ltp=<prefix-to-be-checked>

Element **<status>** in response indicates whether prefix is available.

Status values are the same as used in the old service.

Status **eOK** means prefix is available.

Status **eNotSet** means prefix is invalid or other service error.

Example for non-available prefix

Request:

<https://www.ncbi.nlm.nih.gov/projects/bpws/?operation=check<p=BBX>

Response:

```
<response>
  <status>ePrefixAlreadyTaken</status>
</response>
```

Example for available prefix

Request:

<https://www.ncbi.nlm.nih.gov/projects/bpws/?operation=check<p=BBXZZX>

Response:

```
<response>
  <status>eOK</status>
</response>
```

Example for invalid prefix

Request:

<https://www.ncbi.nlm.nih.gov/projects/bpws/?operation=check<p=XX>

Response:

```
<response>
  <status>eNotSet</status>
  <error>Prefix "XX" is too short</error>
</response>
```

Reserve locus tag prefix

Reservation should be performed with request **PUT**. Attempting reservation with method **GET** will return an error.

Service URL: <https://www.ncbi.nlm.nih.gov/projects/bpws/>

The following parameters are required:

- operation=reserve
- ltp=<prefix-to-be-reserved>

Successful reservation will return HTTP status **200** (it is HTTP status, not a service status).

Status **400** indicates incorrect request, statuses **404** and **409** indicate unsuccessful reservation and status **500** - internal service errors.

Among with standard HTTP status service returns XML content with service status, messages and errors.

Reservation response examples

```
<response>
  <status>ePrefixAlreadyReserved</status>
  <error>Prefix "TEST_01_TEST" already reserved</error>
</response>
```

```
<response>
  <status>eOK</status>
  <message>Prefix "TEST_02_TEST" has been registered</message>
</response>
```

Usage example (python)

```
#!/env/bin/python

import sys
import requests

base_url = 'https://www.ncbi.nlm.nih.gov/projects'

user_name = 'login'
passwd = 'password'

def test_get():
    print('Testing GET...')
    url = base_url + '/bpws/?operation=check&ltp=XX'
    req = requests.get(url, auth=(user_name, passwd))
    print(req.status_code)
    print(req.text)
    print()

def test_put():
    print('Testing PUT...')
    url = base_url + '/bpws/?operation=reserve&ltp=TEST_02_TEST'
    req = requests.put(url, auth=(user_name, passwd))
    print(req.status_code)
    print(req.text)
    print()

def main():
    test_get()
    test_put()
    sys.exit(0)

main()
```