Research Infrastructures and COVID-19 Research

Responses to the questionnaire

SIB Swiss Institute of Bioinformatics

SIB Swiss Institute of Bioinformatics leads and coordinates the field of bioinformatics in Switzerland. Data science experts join forces to advance biological and medical research and enhance health.

SERVICE/S IMPLEMENTED

ExPASy is the SIB Bioinformatics Resource Portal which provides access to scientific databases and software tools in different areas of life sciences.

▪ **What stage in COVID-19 intervention your RI is addressing?**

The SIB Resources showcased in ExPASy support the COVID-19 / SARS-CoV-2 research, and encompass the knowledge of SARS-CoV-2 protein sequences and their functions, the comparison of the SARS-CoV-2 virus genome with the SARS virus' genomes, the detection of within-host genetic variation of SARS-CoV-2, the glycosylation information of SARS-CoV-2 spike protein, real-time tracking of the coronavirus genome evolution, or the automated annotation of the scientific literature, and social media mining, to name a few.

▪ **Instruments/databases involved:**

The resources listed in ExPASy are: UniProtKB/Swiss-Prot, ViralZone, SIB COVID-19 Integrated Knowledgebase, SWISS-MODEL, SwissDrugDesign, V-pipe, PROSITE, HAMAP, Cellosaurus, neXtProt, GlyConnect, Nextstrain, COVID-19 Scenarios, BEAST2 - COVID-19 Monitoring, Computational Linguistics for COVID-19

▪ **How is the proposal submitted?**

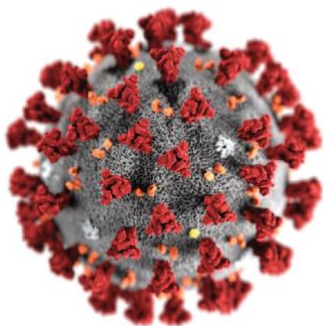https://www.expasy.org/

▪ **Who evaluates the proposal?**

No evaluation. However, most of the cited resources are first-class resources heavily used by the scientific community.

▪ **Is the submission continuous, or linked to a deadline?**

Continuous

▪ **What is the estimated time from the submission to the access / service provision?**

The submission is done only if the access is open. The list is evolving on a daily basis.

CHARACTERISTICS OF THE ACCESS

Restrictions: No

Comment for remote access only: SIB Swiss Institute of Bioinformatics

All RIs: Is the access free for non-proprietary research?	YES
All RIs: Is commercial access available at reduced prices?	NO

Additional comments related to the questions above: The tools showcased in ExPASy are free. However, some of the tools of the SwissDrugDesign suite are free for academic use, but subject to the licensing conditions for the industry.

ACCESSIBILITY OF THE PUBLICATION AND DATA

Is there any requirement to publish in open access journals?	NO
Is the data generated associated to metadata and is it publicly available?	YES
Where is the data or metadata published? (e.g. in the institution's catalogue, in other open data repositories, etc).	Not applicable for our purpose.