

Curating the GFKB Table

Protocol/Procedure:

1.0 – Accessing the GFKB function table.

- 1.1 The most up-to-date copies of the GFKB and the Black List are available on (<https://hive.biochemistry.gwu.edu/gfkb>). Defer to the Internal Lab Manager for verification. Download these CSVs.

2.0 – Generating organisms' GenBank reference material

- 2.1 Go to GenBank (<https://www.ncbi.nlm.nih.gov/genbank/>). In front of the search bar, verify that "Nucleotide" is selected in the dropdown menu.
- 2.2 In the GenBank Accession column of GFKB csv. file, copy and paste the GenBank accession value into the GenBank search bar from (2.1)
- 2.3 GenBank then provides the organisms' sequence record name in bold at the top of the page. Copy and paste the organism's sequence name it into the GenBank record name column of the GFKB table.
- 2.4 Click the underlined organism name next to "ORGANISM". The GenBank webpage is redirected to NCBI Taxonomy Browser. Record the bolded taxonomy name into the NCBI taxonomy name column of the GFKB table.
- 2.5 Record the Taxonomy ID into the NCBI taxonomy column of the GFKB table.
- 2.6 In GenBank, under "Related information", select "Assembly". Select the underlined assembly ID at the top of the page under "Links from Nucleotide". Copy and paste the RefSeq assembly accession into the RefSeq Accession column of the GFKB table.
- 2.7 Scroll to the bottom of the page to Assembly Definition tab. This tab provides a table of RefSeq sequence accession IDs for chromosomes and/or plasmids from the specific organism. Record only the plasmids' RefSeq accession IDs into the GenBank plasmids accessions column in the GFKB table.
- 2.8 Copy and paste the GenBank assembly accession into Assembly ID (UP matched) column of the GFKB table.
- 2.9 Under "Related information", select "Taxonomy". Then select the organism's name at the top of the page. The taxonomy ID is listed at the top of the page. Verify that the taxonomy number from the Tax ID column of the GFKB table is identical to the taxonomy ID listed in GenBank.

3.0 – Save

- 3.1 Save the newly curated GFKB table appropriately.