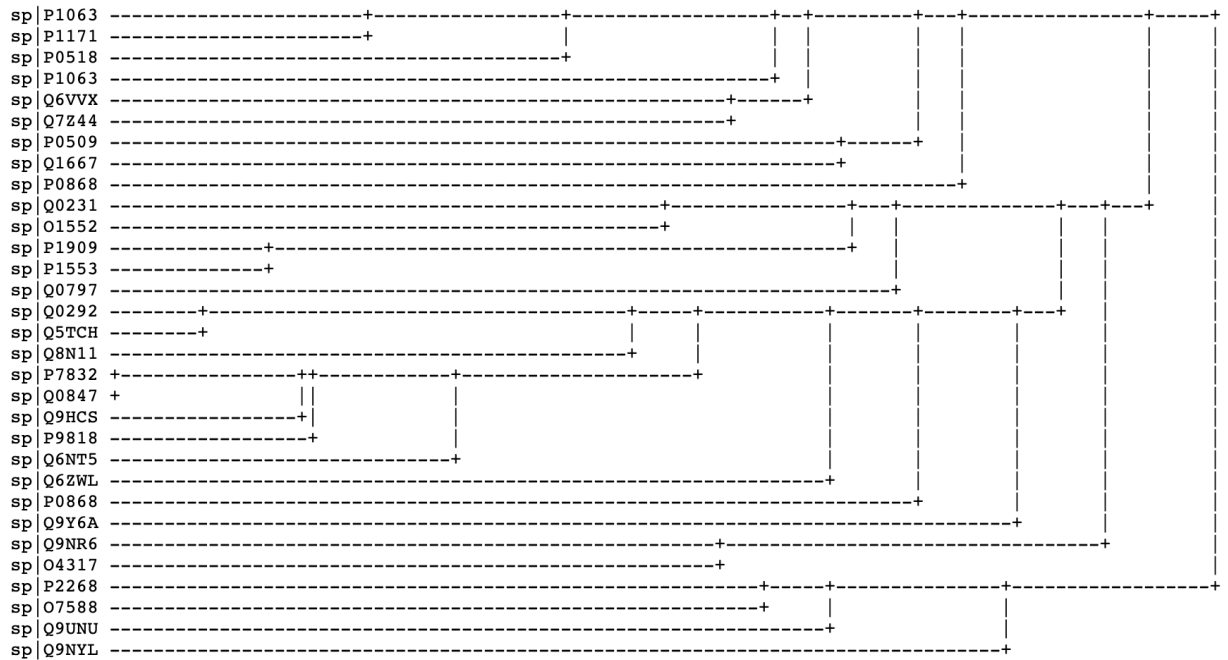1.) P450[All Fields] AND hydroxylase[All Fields] AND "Homo sapiens"[Organism] AND swissprot[filter]

2.) 31 GIs

3.) Phylogeny file:

```
sp|P1063 --------------------+----------------+------------+--+---------+--+------------+-----+
sp|P1171 ----------------------+               |           |  |         |  |            |     |
sp|P0518 ----------------------------------+   |           |  |         |  |            |     |
sp|P1063 ----------------------------------------------+   |  |         |  |            |     |
sp|Q6VVX ---------------------------------------+-----+    |  |         |  |            |     |
sp|Q7Z44 --------------------------------------+          |  |         |  |            |     |
sp|P0509 ----------------------------------------+-----+  |  |         |  |            |     |
sp|Q1667 ----------------------------------------------+  |  |         |  |            |     |
sp|P0868 ------------------------------------------------+ |  |         |  |            |     |
sp|Q0231 -------------------------------+----------------+--+-------------+---+---+       |     |
sp|O1552 --------------------------------------------+    |  |             |   |   |       |     |
sp|P1909 -------------+----------------------------------+ |             |   |   |       |     |
sp|P1553 -------------+                                  | |             |   |   |       |     |
sp|Q0797 -------------------------------------------+    | |             |   |   |       |     |
sp|Q0292 --------+--------------------------+-----+----------+------+---------+--------+---+    |     |
sp|Q5TCH --------+                          |     |          |      |         |        |   |    |     |
sp|Q8N11 --------------------------------+  |     |          |      |         |        |   |    |     |
sp|P7832 +--------------------++----------+------------------+      |         |        |   |    |     |
sp|Q0847 +            ||          |                                 |         |        |   |    |     |
sp|Q9HCS ----------------+|          |                              |         |        |   |    |     |
sp|P9818 ------------------+         |                              |         |        |   |    |     |
sp|Q6NT5 --------------------------+                                |         |        |   |    |     |
sp|Q6ZWL -----------------------------------+                      |         |        |   |    |     |
sp|P0868 -------------------------------------------+              |         |        |   |    |     |
sp|Q9Y6A -------------------------------------------------+        |         |        |   |    |     |
sp|Q9NR6 -------------------------------+------------------------+ |        |   |    |     |
sp|O4317 -----------------------------------+                                 |         |        |   |    |     |
sp|P2268 ----------------------------------------+-----+----------------+------------------+
sp|O7588 -----------------------------------------------+      |                |
sp|Q9UNU -----------------------------------------------+      |
sp|Q9NYL -----------------------------------------------------------------------+
```

Multiple alignment sequence file: file:///Users/gifillianlloyd/Bio/cgi-lib.5304.mul.txt

5.) Interpro ID: IPR017972
   ProSite ID: PS00086
(couldn't find PFam ID, kept being directed to interpro)

6.)

PDB ID 3K9Y: Crystal structure of rat mitochondrial P...