

Supplemental file 2 – SPARQL query of the Number of *Brucella* Protein Virulence Factors

The following SPARQL script queries how many *Brucella* protein virulence factors are represented in IDOBRU.

SPARQL script:

```
prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>
prefix owl: <http://www.w3.org/2002/07/owl#>
PREFIX obo: <http://purl.obolibrary.org/obo/>
SELECT (count(distinct ?n) as ?count)
from <http://purl.obolibrary.org/obo/merged/IDOBRU>
WHERE
{
  ?n rdfs:subClassOf ?n1 .
  ?n rdfs:subClassOf obo:PR_000000001 .
  ?n1 owl:onProperty obo:BFO_0000053 ; owl:someValuesFrom obo:IDO_0100116 .
}
```

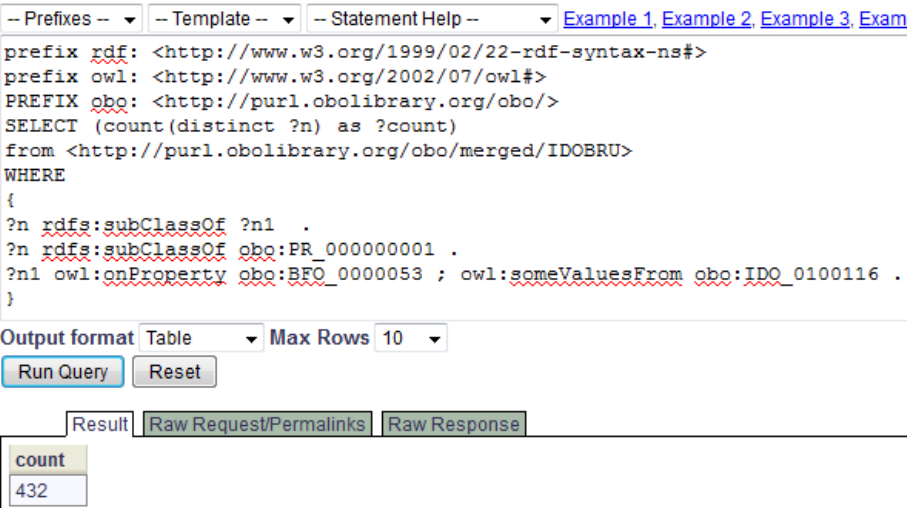
Explanation of ontology terms in the SPARQL script:

obo:PR_000000001 – PR term ‘protein’
obo:BFO_0000053 – BFO term ‘bearer of at some time’
obo:IDO_0100116 – IDO term ‘Brucella virulence factor disposition’.

Screenshot:

The following screenshot was generated using the Ontobee SPARQL program:

<http://www.ontobee.org/sparql>



The screenshot shows the Ontobee SPARQL query interface. At the top, there are dropdown menus for 'Prefixes', 'Template', and 'Statement Help', along with links for 'Example 1', 'Example 2', 'Example 3', and 'Example 4'. The query text is displayed in a text area, and below it are 'Run Query' and 'Reset' buttons. The 'Output format' is set to 'Table' and 'Max Rows' is set to '10'. The 'Result' tab is selected, showing a table with one row and one column.

count
432