Downloading OmniPath network

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1 Small scale test

First see how many unique proteins we have using a suite of small programs[1] put into a package here named `OmniCurl`.

```
[1] Q9Y210
8951 Levels: A0AVK6 A0MZ66 A1A4S6 A1E959 A1KXE4 A1L020 A1X283 ... Q9Y6X0
```

form which we query the first 1,000

which appear to be unique

```
[1] 37329
[1] 37329
```

2 The full network

Downloading the full network appears difficult. After first encapsulating into a single call, after a couple of thousand we get a server side error. Tried adapting the code to poll blocks of proteins and pause in between but this still does not work.

It is still easy to get data on specific lists of proteins

```
Q9UNN5, Q13616, P35222, DONE
  X1 source target is_directed is_stimulation is_inhibition
1  1 Q13616 Q9UNN5           1              0             0
2  1 P55072 Q9UNN5           0              0             0
3  1 P35222 Q9UNN5           1              0             0
```

[1] Simplifies direct code in `RCurl` in by particular configuring options for the GSK firewall proxy. Since it is not save to store a password in your variable space [gets written to disk] this does it on the fly by opening a small pop-up window when ever it is required/

```
4  1 P68400 Q9UNN5           1              0             0
5  1 Q9UNN5 P68400           1              0             0
6  1 O14965 Q9UNN5           1              0             1
                                                                                   sources
1                                                                             ACSN;BioGRID
2                                                                              BioGRID;DIP
3                                                                             ACSN;BioGRID
4 PhosphoSite_dir;MIMP;PhosphoPoint;HPRD;Signor;PhosphoSite;PhosphoNetworks;phosphoELM
5                                                                   ACSN;HPRD;PhosphoPoint
6                            PhosphoSite_noref;MIMP;Signor;PhosphoSite;PhosphoSite_dir

1
2 18775313;21914798;15743842;20057067;21645854;22102026;22350894;23293021;23383273;2461942
3
4                                                                   11378439;11713579;1283204
5
6
                                                 dip_url
1
2 http://dip.doe-mbi.ucla.edu/dip/DIPview.cgi?IK=187154
3
4
5
6
```

or a simplified list of all the interactions without citations etc.:

```
  source target is_directed is_stimulation is_inhibition dip_url
1 Q13616 Q9UNN5           1              0             0
2 P35222 Q13616           1              0             0
3 Q13616 P35222           1              0             1
4 O14818 Q13616           1              1             0
5 Q13616 P46527           1              1             1
6 P25054 Q13616           1              0             0
```

using our packages basic routine.