ToxPredict application

Does the model make use of descriptors?

OpenTox Ontology API, HTTP GET, SPARQL query

Yes, here is a list of features and algorithms, used to calculate descriptors for the training set

Ontology service

Are the descriptor values for query compounds already calculated and available in OpenTox database?

OpenTox Dataset API, HTTP GET

Yes, not available

OpenTox Algorithm API, HTTP POST with Dataset URI of query compounds as input parameter

HTTP code 202 “Accepted”

Algorithm service

Create a new task

Task service

Is the task completed?

OpenTox Task API, HTTP GET on Task URI

HTTP code 200 “OK”

Dataset Task URI in HTTP Location: header

Yes, here is the Dataset URI of the results

Run the selected models

OpenTox Model API, HTTP POST with new Dataset URI as input parameter

Dataset service

Submit the results to Dataset service

OpenTox Dataset API, HTTP POST

Algorithm service

Task service

Model service