

Projeto MC536

Eduardo Augusto Simão Vasconcellos RA: 196240

Victória Pedrazzoli Ferreira RA: 206664

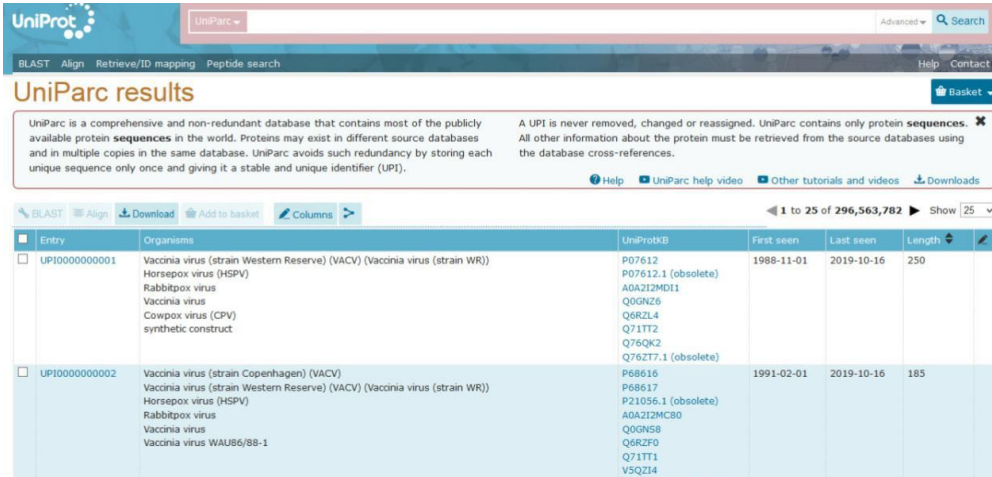
José Carlos Cieni Júnior RA: 170859

Arthur Biscaino Fruch RA: 164373



Banco de Dados: <https://www.uniprot.org/uniparc/>

- Banco de proteínas;
- Informações de vacinas, taxonomia, genes;



The screenshot displays the UniParc database interface. At the top, there's a navigation bar with 'UniProt' and 'UniParc' logos, a search bar, and links for 'BLAST', 'Align', 'Retrieve/ID mapping', 'Peptide search', 'Help', and 'Contact'. Below this, the 'UniParc results' section contains a descriptive text box and a table of results. The text box explains that UniParc is a comprehensive and non-redundant database of publicly available protein sequences, where each unique sequence is assigned a stable and unique identifier (UPI). The table below lists two entries, both for Vaccinia virus (strain Western Reserve) (VACV) (Vaccinia virus (strain WR)). The first entry (UPI10000000001) lists several UniProtKB IDs (P07612, P07612.1 (obsolete), A0A3J2M0I1, Q0GNZ6, Q6RZL4, Q71TT2, Q76QK2, Q76ZT7.1 (obsolete)) and shows it was first seen in 1988-11-01 and last seen in 2019-10-16, with a length of 250. The second entry (UPI10000000002) lists UniProtKB IDs (P68616, P68617, P21056.1 (obsolete), A0A3J2M0C80, Q0GN58, Q6RZF0, Q71TT1, V5QZ14) and shows it was first seen in 1991-02-01 and last seen in 2019-10-16, with a length of 185.

Entry	Organism	UniProtKB	First seen	Last seen	Length
<input type="checkbox"/> UPI100000000001	Vaccinia virus (strain Western Reserve) (VACV) (Vaccinia virus (strain WR)) Horsepox virus (HSPV) Rabbitpox virus Vaccinia virus Cowpox virus (CPV) synthetic construct	P07612 P07612.1 (obsolete) A0A3J2M0I1 Q0GNZ6 Q6RZL4 Q71TT2 Q76QK2 Q76ZT7.1 (obsolete)	1988-11-01	2019-10-16	250
<input type="checkbox"/> UPI100000000002	Vaccinia virus (strain Copenhagen) (VACV) Vaccinia virus (strain Western Reserve) (VACV) (Vaccinia virus (strain WR)) Horsepox virus (HSPV) Rabbitpox virus Vaccinia virus Vaccinia virus WAU86/88-1	P68616 P68617 P21056.1 (obsolete) A0A3J2M0C80 Q0GN58 Q6RZF0 Q71TT1 V5QZ14	1991-02-01	2019-10-16	185



Análises

Característica hereditária das informações
dificulta busca por grupos com algo em
comum



Pesquisas em camadas, por taxonomia,
nome da proteína e afins



Exemplo

xquery

```
let $doc := doc("uniparc-250.xml")
for $p in $doc/*:dbReference
  where contains(data($p/*:property[@type= 'gene_name']/@value), 'VAC') and
    $p/*:property[@type='NCBI_taxonomy_id']/@value != '10245'
return $p
```

```
<dbReference xmlns="http://uniprot.org/uniparc" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" type="UniProtKB/Swiss-Prot">
  <property type="NCBI_GI" value="55977540"/>
  <property type="NCBI_taxonomy_id" value="10254"/>
  <property type="protein_name" value="Protein E7"/>
  <property type="gene_name" value="VACWR063"/>
</dbReference>
<dbReference xmlns="http://uniprot.org/uniparc" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" type="EMBL" id="AA089342">
  <property type="NCBI_GI" value="29692169"/>
  <property type="NCBI_taxonomy_id" value="10254"/>
  <property type="protein_name" value="soluble, myristylprotein"/>
  <property type="gene_name" value="VACWR063"/>
  <property type="proteome_id" value="UP000000344"/>
  <property type="component" value="Genome"/>
</dbReference>
<dbReference xmlns="http://uniprot.org/uniparc" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" type="UniProtKB/Swiss-Prot">
  <property type="NCBI_GI" value="137632"/>
  <property type="NCBI_taxonomy_id" value="10254"/>
  <property type="protein_name" value="Probable FAD-linked sulphydryl oxidase E10"/>
  <property type="gene_name" value="VACWR066"/>
</dbReference>
```