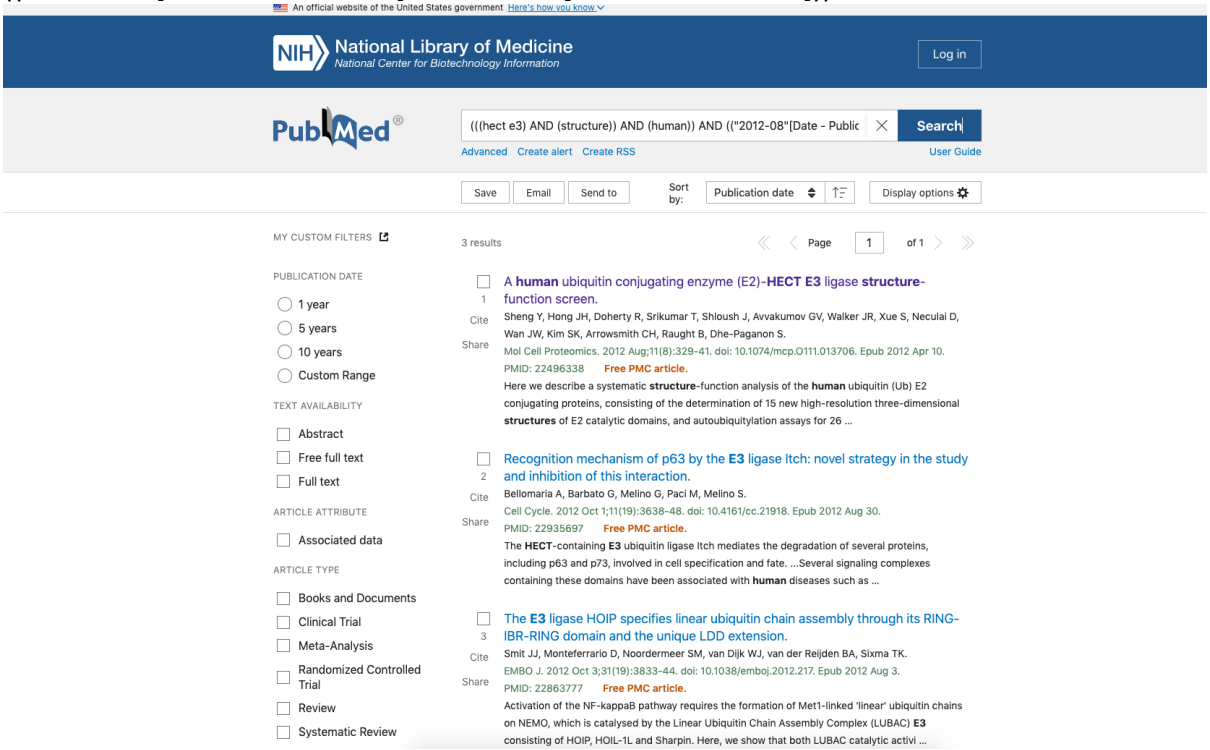
1. **naloga**

DOI: [10.1074/mcp.O111.013706](https://doi.org/10.1074/mcp.O111.013706)

pot do rešitve:

advanced iskanje na PubMed: (((hect e3) AND (structure)) AND (human)) AND (("2012-08"[Date - Publication] : "2012-08"[Date - Publication]))



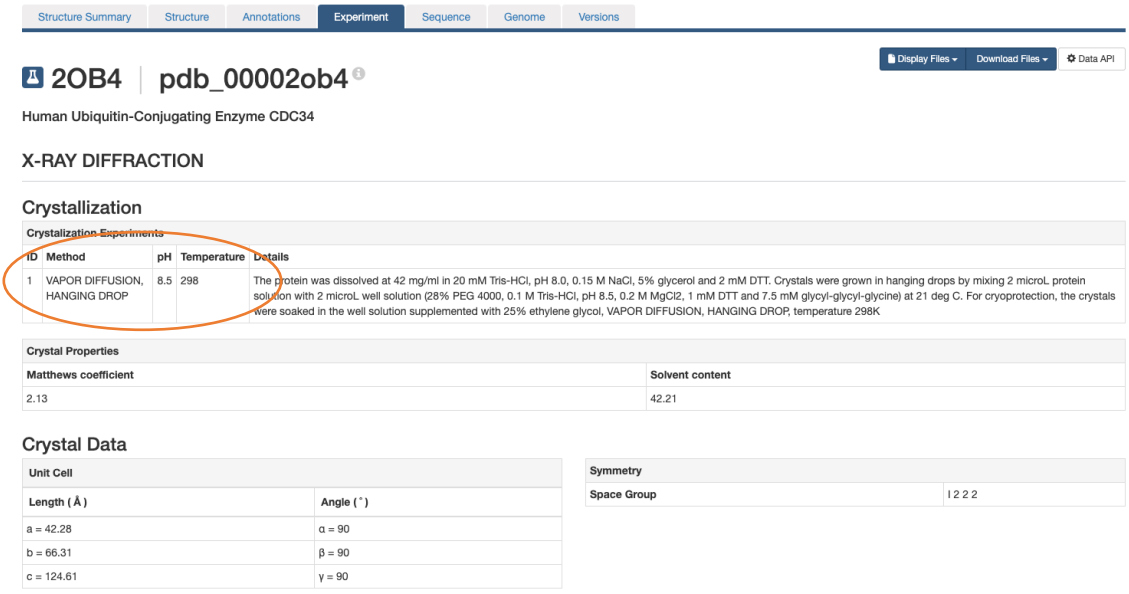
2. **naloga**

pdb koda: 2OB4

ekspresijski sistem: [Escherichia coli BL21(DE3)]

ločljivost in metoda: X-RAY DIFFRACTION, 2.40 Å

pH in temperatura: 298K in 8,5



3. **naloga**

vse piše na GenBank

delež CDS regije: 50,1 % (dolžina CDS regije: 710 bp, dolžina celotnega zaporedja: 1418 bp)

število eksonov: 5

fosforilirani ak ostanki: 5

vezavna regija SCF: YCVKTKAPAPDEGSDLFYDDYYEDGEVEEEADSCFGDDEDDSGTEES

4. **naloga**

iskanje po UniProtu

aktivno mesto: C-93

mesto nahajanja: jedro, citoplazma

Formula: $C_{1199}H_{1817}N_{301}O_{381}S_6$ (protparam)

web.expasy.org/cgi-bin/protparam/protparam

```
His (H)   2        0.8%
Ile (I)   9        3.8%
Leu (L)  19        8.1%
Lys (K)  14        5.9%
Met (M)   3        1.3%
Phe (F)   9        3.8%
Pro (P)  20        8.5%
Ser (S)  15        6.4%
Thr (T)  13        5.5%
Trp (W)   4        1.7%
Tyr (Y)  13        5.5%
Val (V)  17        7.2%
Pyl (O)   0        0.0%
Sec (U)   0        0.0%

 (B)   0           0.0%
 (Z)   0           0.0%
 (X)   0           0.0%

Total number of negatively charged residues (Asp + Glu): 45
Total number of positively charged residues (Arg + Lys): 24

Atomic composition:
Carbon      C          1199
Hydrogen    H          1817
Nitrogen    N           301
Oxygen      O           381
Sulfur      S             6

Formula: C1199H1817N301O381S6
Total number of atoms: 3704

Extinction coefficients:
Extinction coefficients are in units of  M-1 cm-1, at 280 nm measured in water.
Ext. coefficient    41495
Abs 0.1% (=1 g/l)   1.552, assuming all pairs of Cys residues form cystines


Ext. coefficient    41370
Abs 0.1% (=1 g/l)   1.547, assuming all Cys residues are reduced

Estimated half-life:
The N-terminal of the sequence considered is M (Met).
The estimated half-life is: 30 hours (mammalian reticulocytes, in vitro).
                           >20 hours (yeast, in vivo).
                           >10 hours (Escherichia coli, in vivo).

Instability index:
The instability index (II) is computed to be 51.59
This classifies the protein as unstable.

Aliphatic index: 72.25
Grand average of hydropathicity (GRAVY):-0.612
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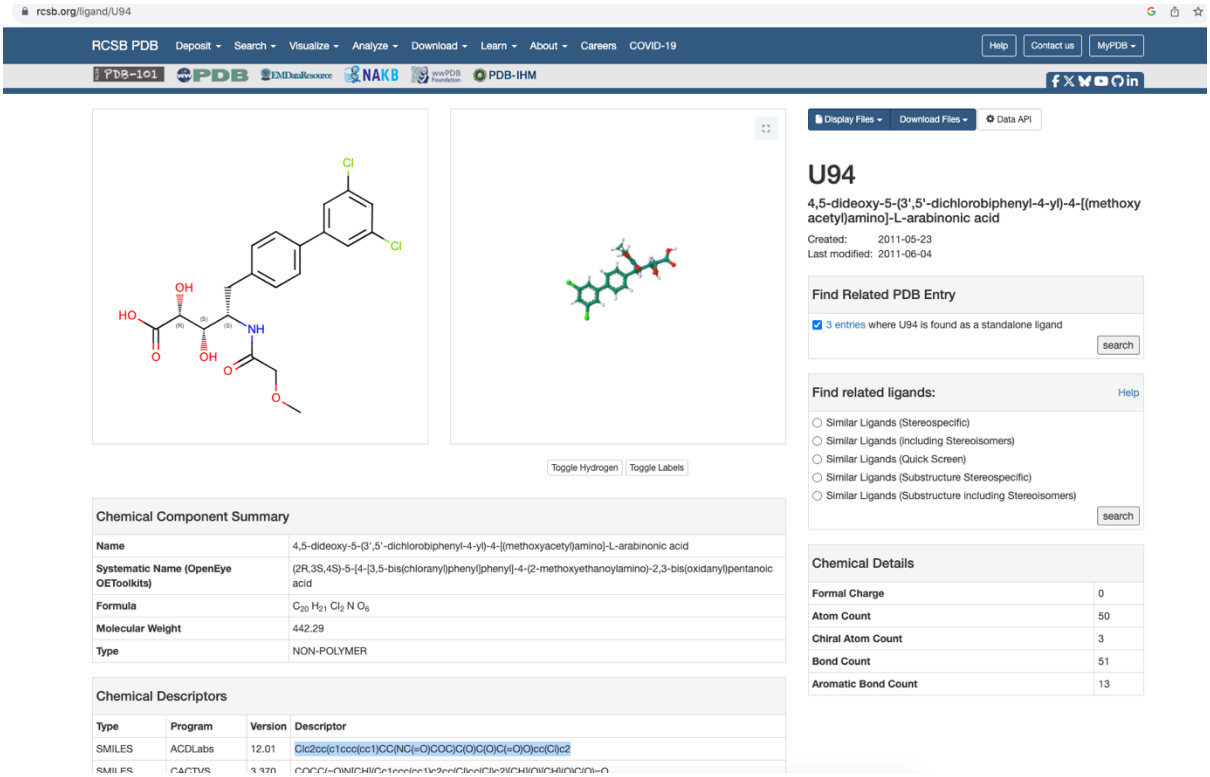
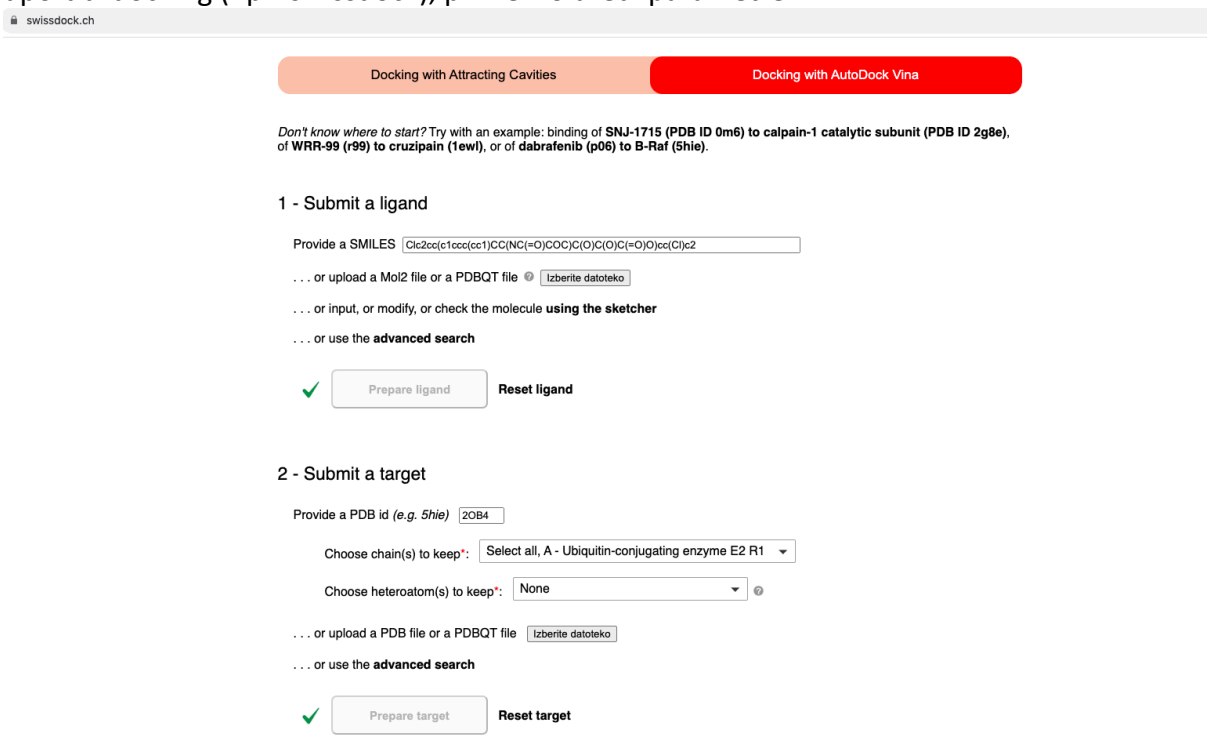
5. naloga

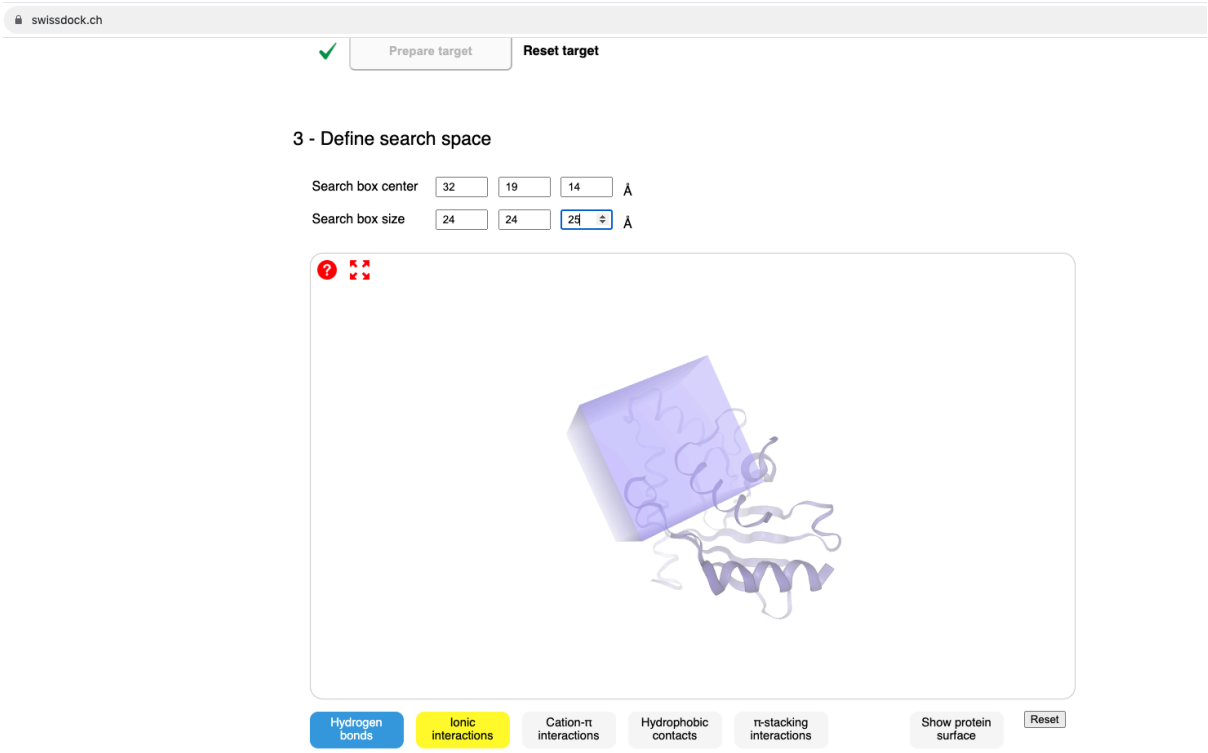
Na pdb od 3RZ3 poiščeš kodo za ligand (U94)

poiščeš SMILES kodo liganda.

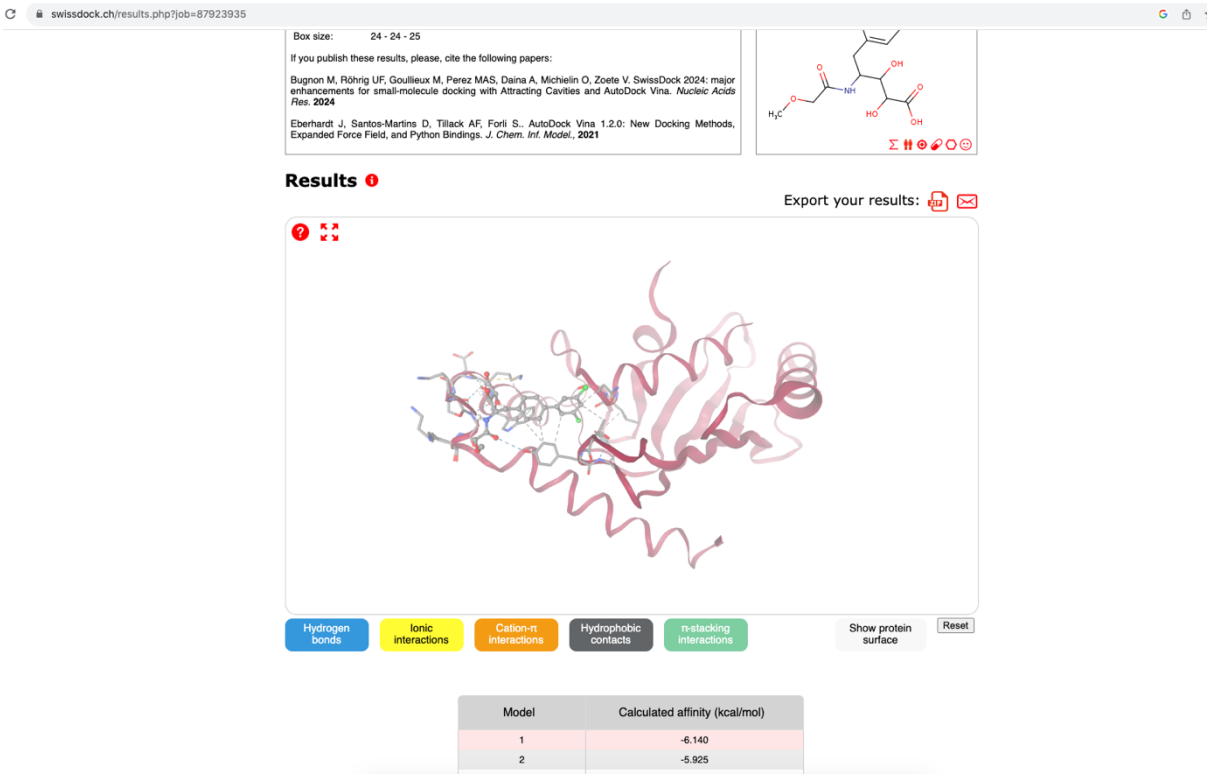


uporabi docking (npr. swissdock), primerno uredi parametre.





rezultat:



interakcije: vodikove vezi, ionske, hidrofobne, pi-pi interakcije