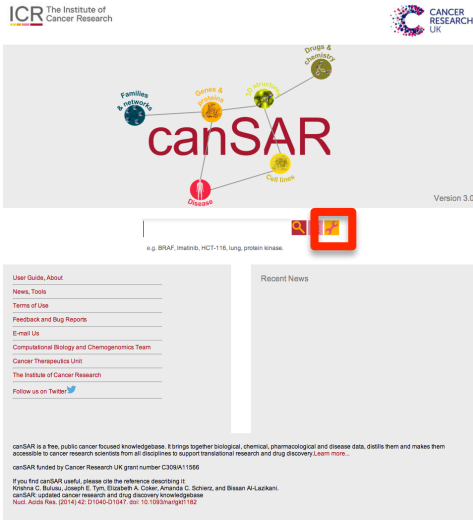
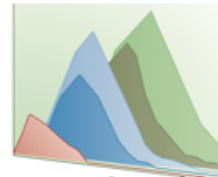


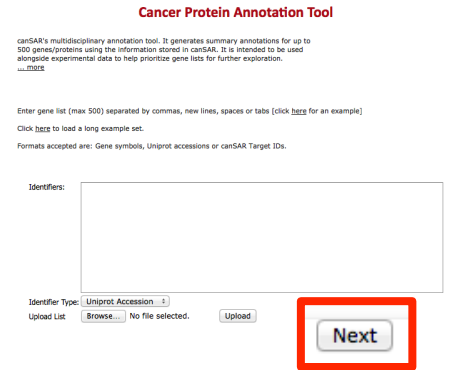
Cancer Protein Annotation Tool (CPAT)



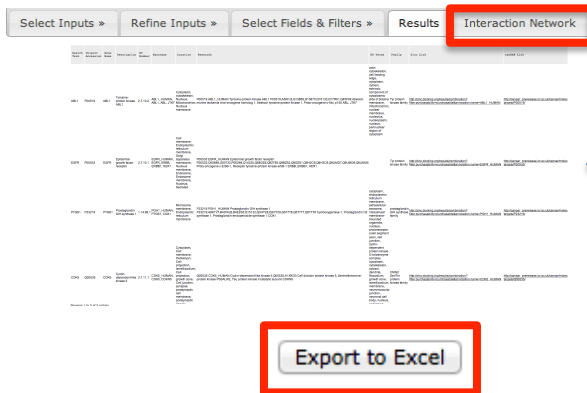
Select the Tools icon on the canSAR homepage.



Cancer Protein Annotation Tool
Produce annotations for a set of protein targets



Enter gene symbols, Uniprot accessions or canSAR Target IDs in the box, then press 'Next' in bottom right hand corner. Make sure you have selected the appropriate identifier type.



The annotation table will now be displayed. It can be exported as a spreadsheet by selecting 'Export to Excel' in bottom right hand corner.

Clicking the 'Interaction Network' tab at the top of the screen will display the network of interactions between the proteins you have searched for.

General Annotation	
<input type="checkbox"/> Select/unselect all	<input checked="" type="checkbox"/>
<input type="checkbox"/> Search Term	<input checked="" type="checkbox"/>
<input type="checkbox"/> Uniprot Accession	<input checked="" type="checkbox"/>
<input type="checkbox"/> Gene Name	<input checked="" type="checkbox"/>
<input type="checkbox"/> Description	<input checked="" type="checkbox"/>
<input type="checkbox"/> EC Number	<input checked="" type="checkbox"/>
<input type="checkbox"/> Synonyms	<input checked="" type="checkbox"/>
<input type="checkbox"/> Location	<input checked="" type="checkbox"/>
<input type="checkbox"/> Keywords	<input checked="" type="checkbox"/>
<input type="checkbox"/> GO Terms	<input checked="" type="checkbox"/>
<input type="checkbox"/> Family	<input checked="" type="checkbox"/>
<input type="checkbox"/> Zinc Link	<input checked="" type="checkbox"/>
<input type="checkbox"/> canSAR Link	<input checked="" type="checkbox"/>
Similarity to Drug Targets	
<input type="checkbox"/> Select/unselect all	<input checked="" type="checkbox"/>
<input type="checkbox"/> Nearest Drug Target	<input checked="" type="checkbox"/>
<input type="checkbox"/> Matching Drug Targets > 50%	<input checked="" type="checkbox"/>
<input type="checkbox"/> Matching Drug Targets > 35%	<input checked="" type="checkbox"/>
3D Structures	
<input type="checkbox"/> Select/unselect all	<input checked="" type="checkbox"/>
<input type="checkbox"/> Only Include Homologues with Sequence Identity >>	<input type="text" value="100%"/>
<input type="checkbox"/> # Number of 3D Structures	<input type="text" value="1"/>
<input type="checkbox"/> # 3D Structures with Small Molecule Ligand	<input checked="" type="checkbox"/>

Select the annotation options you require, then press 'Next'.

Search Term	Uniprot Accession	Gene Name	Description	EC Number	Synonyms
<input checked="" type="checkbox"/> ABL1	P00519	ABL1	Tyrosine-protein kinase ABL1, ABL, JTK7	2.7.10.2	ABL1_HUMAN, ABL1, ABL, JTK7
<input checked="" type="checkbox"/> EGFR	P00533	EGFR	Epidermal growth factor receptor	2.7.10.1	EGFR_HUMAN, EGFR, ERBB, ERBB1, HER1
<input checked="" type="checkbox"/> PTGS1	P23219	PTGS1	Prostaglandin-GH synthase 1	1.14.99.1	PGH1_HUMAN, PTGS1, COX1
<input checked="" type="checkbox"/> CDK5	Q00535	CDK5	Cyclin-dependent-like kinase 5	2.7.11.1	CDK5_HUMAN, CDK5, CDKN5
<input checked="" type="checkbox"/> CDK5R1	Q15078	CDK5R1	Cyclin-dependent kinase 5 activator 1		CD5R1_HUMAN, CDK5R1, CDK5R, NCK5A

Confirm which proteins you are searching for, then click 'Next'.