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| **Bioactive peptide databases** |

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| |  |  |  |  | | --- | --- | --- | --- | | **Name** | **Link** | **Description** |  | | AHTPDB | <http://crdd.osdd.net/raghava/ahtpdb/> | Database of antihypertensive peptides | 1 | | AllergenOnline Celiac Disease | <http://www.allergenonline.org/celiachome.shtml> | Database of celiac-toxic peptides and proteins associated with the AllergenOnline database | 2 | | AMPer | <http://marray.cmdr.ubc.ca/cgi-bin/amp.pl> | Database of antimicrobial peptides and program searching for fragments with sequences similar to antimicrobial peptides in query protein sequence | 3 | | ANTIMIC | <http://research.i2r.a-star.edu.sg/Templar/DB/ANTIMIC> | Database of antimicrobial peptides. Enables to search the similarities using BLAST. | 4 | | **APD** | <http://aps.unmc.edu/AP/main.html> | Database of antimicrobial and anticancer peptides | **5\*** | | ArachnoServer | <http://www.arachnoserver.org/mainMenu.html> | Database of toxic peptides and proteins from spider venoms | 6 | | ATDB | <http://protchem.hunnu.edu.cn/toxin> | Database of toxic proteins and peptides of animal origin | 7 | | AVPdb | <http://crdd.osdd.net/servers/avpdb/> | Database of antiviral peptides | 8 | | BaAMPs | <http://www.baamps.it/> | Database of antimicrobial peptides tested against microbial biofilms | 9 | | BACTIBASE | [http://bactibase.pfba-lab-tun.org](http://bactibase.pfba-lab-tun.org/) | Database of antibacterial peptides (bacteriocins) | 10 | | BactPepDB | <http://bactpepdb.rpbs.univ-paris-diderot.fr/cgi-bin/home.pl> | Database of predicted bacterial peptides | 11 | | BAGEL2 | <http://bagel2.molgenrug.nl/> | Database of antibacterial peptides (bacteriocins) | 12 | | BAGEL3 | [http://bagel.molgenrug.nl](http://bagel.molgenrug.nl/)/ | Database of antibacterial peptides (bacteriocins) \* **genome search** | 13 | | BioPD | [http://biopd.bjmu.edu.cn](http://biopd.bjmu.edu.cn/) | Database of biologically active peptides | 14 | | BioTherapi | <http://crdd.osdd.net/raghava/biotherapi/db.html> | Metabase of peptides revealing bioactivity and useful as drugs | 15 | | Brainpeps | <http://brainpeps.ugent.be/> | Database of peptides passing through the blood-brain barrier | 16 | | **CAMP** | <http://www.bicnirrh.res.in/antimicrobial/> | Database of antimicrobial peptides and proteins (\*allow single page download) | **17\*** | | CancerPPD | <http://crdd.osdd.net/raghava/cancerppd/index.php> | Database of anticancer peptides | 18 | | ClusterMine360 | <http://www.clustermine360.ca/> | Database of non-ribosomal peptides including information about their pharmacological activity and genes encoding enzymes involved in biosynthesis | 19 | | ConoServer | <http://research1t.imb.uq.edu.au/conoserver/> | Database of biologically active peptides of snails from the genus Conus | 20 | | C-PAmP | <http://bioserver-3.bioacademy.gr/Bioserver/C-PAmP/> | Database of in silico predicted antimicrobioal peptides of plant origin | 21 | | CPPsite | <http://crdd.osdd.net/raghava/cppsite/> | Database of cell-penetrating peptides | 22 | | **DADP** | <http://split4.pmfst.hr/dadp/> | Database of defense peptides. Includes mainly antimicrobial activities nvolved in biosynthesis | **23 \*** | | DAMPD | <http://apps.sanbi.ac.za/dampd/> pan>  #(maintain till 2011?) | Database of antimicrobial and hemolytic peptides | 24 | | DBAASP | <http://www.biomedicine.org.ge/dbaasp/> | Database of antimicrobial peptides (**self downloadable**) | 25 | | Defensins knowledgebase | [http://defensins.bii.astar.edu.sg](http://defensins.bii.astar.edu.sg/) | Database of antimicrobial peptides from the defensins family | 26 | | EROP-Moscow | [http://erop.inbi.ras.ru](http://erop.inbi.ras.ru/) | Database of biologically active peptides | 27 | | Hemolytik | <http://crdd.osdd.net/raghava/hemolytik/> | Database of hemolytic peptides ((**self downloadable**)) | 28 | | HIPdb | <http://crdd.osdd.net/servers/hipdb/> n> | Database of HIV inhibiting peptides | 29 | | Hmrbase | <http://crdd.osdd.net/raghava/hmrbase/> | Database of hormones, e.g. peptides | 30 | | IMGT Immunoinformatics | [http://imgt.cines.fr/textes/Immunoinformatics.html#datPEP](http://www.uwm.edu.pl/biochemia/index.php/biopep/32-bioactive-peptide-databases#datPEP) | Website providing access to databases of antimicrobial peptides **(not accessible)** | 31 | | Kalium | <http://kaliumdb.org/> | Database of toxic peptides from scorpion venom acting against potassium channels | 32 | | KEGG Peptide | <http://www.genome.jp/dbget-bin/www_bfind_sub?max_hit=1000&serv=gn&dbkey=compound&keywords=peptide&page=1> | List of peptides annotated in KEGG datatabase | 33 | | LabWorm Antimicrobial peptide | <https://labworm.com/category/protein-peptide/antimicrobial-peptide> | Metabase of antimicrobial peptides **(commercial )** | 34 | | LAMP | <http://biotechlab.fudan.edu.cn/database/lamp/> | Database of antimicrobial peptides **(self downloadable, fasta format)** | 35 | | MilkAMP | <http://milkampdb.org/home.php> | Database of antimicrobial peptides from milk (**no sequence)** | 36 | | NeuroPedia | <http://proteomics.ucsd.edu/Software/NeuroPedia/index.html> | Database of neuropeptides including library of mass spectra | 37 | | NeuroPep | <http://isyslab.info/NeuroPep/> x.html | Database of neuropeptides | 38 | | NORINE | <http://bioinfo.lifl.fr/norine/> | Database of nonribosomally synthesized bioactive peptides | 39 | | OMICTools Peptide | <http://omictools.com/peptide-prediction-category> | Metabase of peptides at the OMICTools website | 40 | | ParaPep | <http://crdd.osdd.net/raghava/parapep/> | Database of antiparasitic peptides **(self downloadable)** | 41 | | **PepBank** | [http://pepbank.mgh.harvard.edu](http://pepbank.mgh.harvard.edu/) | A database of biologically active peptides providing program searching for fragments with sequences similar to peptides in the database (is a program?) | **42 \*** | | PepBind | <http://pepbind.bicpu.edu.in/> | Database containing information about protein-peptide interactions | 43 | | Peplife | <http://crdd.osdd.net/raghava/peplife/> | Database containing information about halflife of experimentally validated therapeutic peptides | 44 | | PeptideDB | <http://www.peptides.be/> | Major database of biologically active peptides, peptide precursors and motifs in Metazoa | 45 | | PepX | <http://pepx.switchlab.org/> | Database of structures of protein-peptide complexes | 46 | | PhytAMP | [http://phytamp.pfba-lab.org](http://phytamp.pfba-lab.org/) | Database of antimicrobial peptides and proteins of plant origin | 47 | | ProPepper | <https://propepper.net/> | *Database of peptides of cereal origin* | *No* | | Quorumpeps | <http://quorumpeps.ugent.be/> | *Database of bioactive peptides. Structures are written in SMILES notation apart from single-letter code. Enables structure comparison between peptides and peptidomimetics* | *48* | | RAPD | <http://faculty.ist.unomaha.edu/chen/rapd/index.php> | Database of recombinant antimicrobial peptides | 49 | | SATPdb | <http://crdd.osdd.net/raghava/satpdb/links.php> | Metabase of bioactive peptides | 50 | | SwePep | [http://www.swepep.org](http://www.swepep.org/) | Database of biologically active peptides including sophisticated computing tools for peptide mass spectra interpretation | 51 | | TumorHoPe | <http://crdd.osdd.net/raghava/tumorhope/> | Database of tumor-recognizing peptides | 52 | | WALTZ-DB | <http://waltzdb.switchlab.org/> | Database of amyloid hexapeptides | 53 | | **YADAMP** | <http://www.yadamp.unisa.it/> | Database of antimicrobial peptides (\* allow search, but no link for download) | **54\*** | |

1. Suggested top priority:

As highlighted in red with \* , currently all top 5 database are in antimicrobial area.

1. 3 area we need ML : (a)antimicrobial, (b)half-life, and (c)hymolytic/toxic activity

So database coved in this table focus on area b and c will be next stage learning.

Good resource of this type of work could refer to: <http://www.imtech.res.in/raghava/>