

Resource Summary Report

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VBASE2

RRID:SCR_007082

Type: Tool

Proper Citation

VBASE2 (RRID:SCR_007082)

Resource Information

URL: <http://www.vbase2.org/>

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Description: Integrative database of germ-line V genes from the immunoglobulin loci of human and mouse. It presents V gene sequences extracted from the EMBL nucleotide sequence database and Ensembl together with links to the respective source sequences. Based on the properties of the source sequences, V genes are classified into 3 different classes: * Class 1: genomic and rearranged evidence * Class 2: genomic evidence only * Class 3: rearranged evidence only This allows careful sequence quality validation by the user. References to other immunological databases (KAT, IMGT/LIGM and VBASE) are given to provide all public annotation data for each V gene. The VBASE2 database can be accessed either by the Direct Query interface or by the DNAPLOT Query interface. The Sequences given by the user are aligned with DNAPLOT against the VBASE2 database. Direct Query allows to enter sequence IDs and names (Field 1), choose species, locus, V gene family and class (Field 2) or search for 100% sequences (Field 3). At the DNAPLOT Query, the sequences given by the user are aligned with DNAPLOT against the VBASE2 database. The DNAPLOT program offers V gene nucleotide sequence alignment referring to the IMGT V gene unique numbering. The Quick Search can be used either for Direct Query to search for sequence IDs and V gene names or for DNAPLOT Query for up to 5 sequences. The new Fab Analysis allows you to align Fab, scFab, scAb or scFv sequences with DNAPLOT against the VBASE2 database, where both heavy and light chain are analyzed.

Abbreviations: VBASE2

Synonyms: VBASE2: the integrative germ-line V gene database

Resource Type: analysis service resource, data analysis service, data or information resource, database, production service resource, service resource

Defining Citation: [PMID:15608286](#)

Keywords: v gene sequence, v gene, gene, dna, sequence, bio.tools, FASEB list

Funding: BMBF 031U110A/031U210A

Availability: Acknowledgement requested

Resource Name: VBASE2

Resource ID: SCR_007082

Alternate IDs: nlx_25238, biotools:germ-line_v_genes

Alternate URLs: https://bio.tools/germ-line_v_genes

Record Creation Time: 20220129T080239+0000

Record Last Update: 20260912T195649+0000

Ratings and Alerts

No rating or validation information has been found for VBASE2.

No alerts have been found for VBASE2.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 74 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#) .

Baatz F, et al. (2025) Targeting BCL11B in CAR-engineered lymphoid progenitors drives NK-like cell development with prolonged anti-leukemic activity. Molecular therapy : the journal of the American Society of Gene Therapy, 33(4), 1584.

Tian Y, et al. (2024) Screening of Neutralizing Antibodies against FaeG Protein of Enterotoxigenic Escherichia coli. Veterinary sciences, 11(9).

Wu L, et al. (2024) Development of monoclonal antibodies targeting the conserved fragment of hexon protein to detect different serotypes of human adenovirus. Microbiology spectrum, 12(4), e0181623.

Ruschig M, et al. (2024) Human antibodies neutralizing the alpha-latrotoxin of the European black widow. Frontiers in immunology, 15, 1407398.

Li M, et al. (2023) Three neutralizing mAbs induced by MPXV A29L protein recognizing different epitopes act synergistically against orthopoxvirus. Emerging microbes & infections, 12(2), 2223669.

Chanpong T, et al. (2023) A novel anti-membrane CD30 single-chain variable fragment discovered from the human phage library: A potential targeted immunotherapy. *PloS one*, 18(4), e0284708.

Langreder N, et al. (2023) Development of an inhibiting antibody against equine interleukin 5 to treat insect bite hypersensitivity of horses. *Scientific reports*, 13(1), 4029.

Zhang H, et al. (2023) IL-21-producing effector Tfh cells promote B cell alloimmunity in lymph nodes and kidney allografts. *JCI insight*, 8(20).

Georg Magalhães C, et al. (2023) Impaired proliferation and migration of HUVEC and melanoma cells by human anti-FGF2 mAbs derived from a murine hybridoma by guided selection. *Bioengineered*, 14(1), 2252667.

Salem R, et al. (2022) Generation and utility of a single-chain fragment variable monoclonal antibody platform against a baculovirus expressed recombinant receptor binding domain of SARS-CoV-2 spike protein. *Molecular immunology*, 141, 287.

Cavazzoni CB, et al. (2022) Follicular T cells optimize the germinal center response to SARS-CoV-2 protein vaccination in mice. *Cell reports*, 38(8), 110399.

Gu X, et al. (2022) Protective Human Anti-Poxvirus Monoclonal Antibodies Are Generated from Rare Memory B Cells Isolated by Multicolor Antigen Tetramers. *Vaccines*, 10(7).

Rademaker L, et al. (2021) Role of mutations and post-translational modifications in systemic AL amyloidosis studied by cryo-EM. *Nature communications*, 12(1), 6434.

Bertoglio F, et al. (2021) SARS-CoV-2 neutralizing human recombinant antibodies selected from pre-pandemic healthy donors binding at RBD-ACE2 interface. *Nature communications*, 12(1), 1577.

Khatri I, et al. (2021) Population matched (pm) germline allelic variants of immunoglobulin (IG) loci: Relevance in infectious diseases and vaccination studies in human populations. *Genes and immunity*, 22(3), 172.

Rademaker L, et al. (2021) Cryo-EM reveals structural breaks in a patient-derived amyloid fibril from systemic AL amyloidosis. *Nature communications*, 12(1), 875.

Ban B, et al. (2021) Novel chimeric monoclonal antibodies that block fentanyl effects and alter fentanyl biodistribution in mice. *mAbs*, 13(1), 1991552.

Bertoglio F, et al. (2021) A SARS-CoV-2 neutralizing antibody selected from COVID-19 patients binds to the ACE2-RBD interface and is tolerant to most known RBD mutations. *Cell reports*, 36(4), 109433.

Geuijen C, et al. (2021) A human CD137×PD-L1 bispecific antibody promotes anti-tumor immunity via context-dependent T cell costimulation and checkpoint blockade. *Nature communications*, 12(1), 4445.

Yang X, et al. (2021) Novel Allele Detection Tool Benchmark and Application With Antibody Repertoire Sequencing Dataset. *Frontiers in immunology*, 12, 739179.