

## Solutions for Sequence Searching in Patents

# Unravel the complex strands of biological sequences

**Derwent provides solutions to search and analyze sequences in global patent data enabling users to quickly understand sequence intelligence supporting both chemical and biologic patent activity:**

- Find, analyze and understand biological sequences data from around the world
- Understand the global patent landscape and competitor activities
- Surface potential patent infringements
- Identify prior art and establish freedom to operate and patentability
- Quickly assess the context of the sequence in the patent

## Derwent SequenceBase

**Search, analysis, and reporting technology designed specifically for sequence searching.**

Derwent SequenceBase is a web-based platform and an essential resource for anyone doing work in biologics and

searching for sequence information in global patents. Intuitively built to efficiently search and analyze sequences, users can search with confidence with access to the most comprehensive set of patent sequence data available.

Biological scientists can spend less time searching for sequence data and more time on research and development, and IP professionals can be confident they don't miss any potential infringements or competitor activities.

- Access GENESEQ™, USGENE®, WOGENE and GENBANK®, the most comprehensive collection of biologic sequences in patents in a single platform
- Quickly analyze references with enriched sequence data annotated to help you find context fast
- Easily share results and collaborate with clients and stakeholders
- Increase the relevancy and focus of search results with filtering tools

# Global coverage of biological sequences in patents.

## **Comprehensive, timely, annotated coverage.**

### **GENESEQ**

GENESEQ is a proprietary database used to easily search and identify biological sequences (DNA, RNA, protein sequences) covered in patents from 56 issuing authorities. Manually annotated to highlight IP context and biological significance, GENESEQ allows IP professionals and biologic scientists to spend less time searching and understanding sequence data and more time assessing patentability, identifying potential infringing patents and tracking competitor activities.

### **Find context faster with annotated analysis**

Our editorial team of more than 40 biology and life sciences experts provides written summaries that clarify and explain sequence novelty and utility of a given sequence, including:

- Enhanced patent titles that are more intuitive
- Record detail includes organism name, gene/protein name, sequence modification or other highlighted biologically significant regions of the sequence, and associated disease information
- Sequence location within the patent document
- Standardized, full bibliographic data
- Links to identical records from NCBI and SWISSPROT, Gene Ontology (GO) when provided in the patent

### **Simplify the complexity of biological sequences**

GENESEQ delivers the entire patent landscape surrounding the biological sequence under investigation with coverage beginning in 1981 from worldwide patent issuing authorities including WO, US, EP, JP, DE, IN, KR, and CN.

### **Never miss a patent with complete timely coverage**

Uniquely, we go beyond what is available in electronic sequence submissions to bring you all sequences – even those that are “hard-to-find” in figures and tables ensuring you have the complete picture.

- Nucleic acid sequences  
10 or more bases in length
- Amino acid sequences  
4 or more residues in length
- All PCR primers and probes of any length

GENESEQ is available through Derwent SequenceBase or can be accessed through an API for organizations that want enterprise-wide access to conduct sequence searching and analysis on their in-house platforms.

## **USGENE**

A trusted resource for life science intellectual property professionals, providing unrivaled searchable access to all available peptide and nucleotide sequences from the published applications and issued patents of the United States Patent and Trademark Office.

With over 191 million biological sequences from more than 232,000 unique U.S. patents and published patent applications, it contains a wealth of essential sequence information not available anywhere else. With coverage beginning in 1981, the database is continually growing with hundreds of documents containing biological sequences added twice per week and within 24 hours of patent publication.

## **WOGENE**

Providing comprehensive coverage from international published patent applications containing nucleic acid and protein sequences from: the World Intellectual Property Organization, the European Patent Office, the Japanese Patent Office, and the Korean Intellectual Property office.

With coverage dating back to 1979 of more than 56 million biological sequences from more than 182,000 unique international published patent applications, it contains a wealth of essential sequence information not available anywhere else. Additional documents containing biological sequences are added twice per week and within 24 hours of publication.

Coverage in USGENE and WOGENE includes:

- Nucleic acid sequences 10 or more bases in length
- Amino acid sequences 4 or more residues in length
- All PCR primers and probes of any length
- Sequence information, including organism name, molecule type, and modifications

Database annotation includes:

- Patent title
- Sequence identity number (SEQ ID NO) within the sequence listing
- Original source organism
- Standardized bibliographic data

## **GenBank**

NIH's genetic sequence database is an annotated collection of all publicly available DNA sequences. GenBank is part of the International Nucleotide Sequence Database Collaboration, which comprises the DNA DataBank of Japan (DDBJ), the European Nucleotide Archive (ENA), and GenBank at NCBI.

With over 228 billion nucleotide bases from more than 199 million (on Feb 2017) individual sequences, GenBank provides access within the scientific community to the most up-to-date and wide-ranging DNA sequence information.

# Derwent's global team of patent research experts execute on sequence search projects with precision, accuracy and thoroughness.

## Patent Search Services

### Results you can trust to make confident decisions

Our team of biotech search specialists have cumulative experience equaling more than 60 years delivering patent consulting services to corporations, government, and academia in the field of life sciences, biotechnology and adjacent technologies.

Our expertise enables our search team to provide a holistic picture of relevant IP by conducting patent studies on biologics and other proteins through sequence searching as well as text-based searches.

For each project, our analysts develop search strategies for target sequences and search type such as patentability, freedom to operate, validity and state-of-the-art search and usually include sequence searching and classification/text searching.

- Unfettered access to Derwent SequenceBase, Derwent World Patent Index in Derwent Innovation, as well as other 3rd party databases

- Global team with search operations and local support in Europe, US, Japan, China and India
- Asian language searching to augment your existing English search capabilities
- Search specialists have advanced degrees in Chemistry and Biochemistry (MS, Ph.D.) and experience as registered patent agents and former patent office examiners
- ISO 27001 security best practices for physical and electronic security to ensure your client's valuable IP has world-class protection while we're engaged in your project
- World-class customer service and not-to-exceed estimates; no rush fees
- Flexible and customizable engagement models

**To learn more about Derwent's sequence searching solutions, visit us at:**

**[derwent.com](http://derwent.com)**