Semantic vocabularies powering search

**Coverage:**
massively enriched with manually curated, context-aware synonyms

**Public Standards:**
built on public ontologies for interoperable data

**Customisable:**
build your own vocab or augment existing ones with ease

**Context-Aware Vocabularies**
At SciBite, we are passionate about building vocabularies with enriched semantic content. Based on public ontologies or reference databases from a wide range of topics, our proprietary semantic enrichment tools transform them into vocabularies, which are then curated and regularly updated by our team of experienced biologists to ensure maximum capture of relevant synonyms for a given subject area or context.

**Computational Search for Text**
Scientists today simply don’t have time to read all of the available content relevant to their research. Computers can help by scanning text with speed, but they do not really understand scientific text, and would struggle to uncover relevant text unless supported by optimised vocabularies. Such optimizations often involve creating a comprehensive collection of domain-specific synonyms (e.g. “anterior limb”, “forelimb”, “arm” for anatomy parts) and handling contextual ambiguity (e.g. “GSK” meaning the company “Glaxosmithkiline” or “glycogen synthase kinase” protein). Without these optimizations, computational search of text will be reminiscent of the “Find” function on your text editor, hugely inadequate for tackling the deluge of scientific text.
Enriching public ontologies
SciBite VOCabs come in the form of flat lists (e.g. a list of all known drugs and their synonyms) or they can be organised into hierarchies (e.g. ChEMBL compounds, gene ontology terms). We blend automated and rule-based curation approaches when building VOCabs, so we can offer our customers vocabularies with a far greater coverage than publicly available resources (e.g. MeSH, Uniprot and HPO).

New entities or synonyms? Just add your own!
new terms, such as “CRISPR” or “Drop-seq”, are often coined out of the blue in rapidly developing fields with competing synonyms. Surely, you will be eager to be the first to scan the literature with new terms without having to wait for the next SciBite update?

Or, perhaps you have internal proprietary vocabularies or lists (research codes, unique internal identifiers) that you would like to include in your local copy of VOCabs to scan internal documents?

That’s why SciBite VOCabs are designed to be easily customizable by the user with common text editors. If you edit and manage VOCabs regularly, SciBite also provides the user-friendly Vocabulary Editing Toolkit (VET) with more sophisticated features designed for vocabulary curators.

With VOCabs, have peace of mind that you can always adapt to your changing business requirements in an agile way.

Sample data with internal codes

<table>
<thead>
<tr>
<th>Sample name</th>
<th>Assay type</th>
<th>Target gene</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample1</td>
<td>A3</td>
<td>G356</td>
</tr>
<tr>
<td>Sample2</td>
<td>A2</td>
<td>G021</td>
</tr>
<tr>
<td>Sample3</td>
<td>A1</td>
<td>G189</td>
</tr>
<tr>
<td>Sample 4</td>
<td>A2</td>
<td>G472</td>
</tr>
</tbody>
</table>

About SciBite
SciBite’s data-first, semantic analytics software is for those who want to innovate and get more from their data. At SciBite we believe data fuels discovery and we are leading the way with our pioneering infrastructure that combines the latest in machine learning with an ontology-led approach to unlock the value of scientific content. Supporting the world’s leading scientific organisations with use-cases from discovery through to development, SciBite’s suite of fast, flexible, deployable API technologies empower our customers, making it a critical component in scientific, data-led strategies. Contact us to find out how we can help you get more from your data.

To learn how SciBite can unlock the value of your data, speak to one of our experts today or email us at contact@scibite.com