

## PROTEOMICS

# Antibodypedia

**A web portal to share antibody validation data.**

The western blot was pristine on the glossy page of the catalog. Then, a few hundred dollars and a collection of microscopy slides later, reality sunk in: the newly acquired antibody was poorly suited for immunohistochemistry. The story sounds familiar? You are not alone.

It is precisely this type of experience and the realization that antibodies rarely come in one-size-fits-all-applications that pushed Mathias Uhlén and Erik Björling at the Royal Institute of Technology in Stockholm to develop Antibodypedia (<http://www.antibodypedia.org/>). “Each antibody should be validated in a specific application, in as standardized a way as possible, and all these data should be shared with the research community,” says Uhlén. “This is what we tried to

achieve with this Antibodypedia.”

Each antibody entry in the portal is accompanied by raw data from up to four validation assays: western blot, immunohistochemistry, protein array and immunofluorescence. To facilitate comparison, Uhlén and colleagues developed a scoring system for each application, ranking results from “supportive” to “uncertain” and “nonsupportive.”

At the moment Antibodypedia ‘only’ contains antibodies generated by the Human Protein Atlas, of which Uhlén is Program Director—‘only’ amounting to 3,900 polyclonal antibodies. The four validation assays, particularly relevant to this type of antibodies, were carried out in a standardized way.

In October, the developers will invite other providers to submit their antibodies and validation data. External submissions, with data obtained outside of the standardized pipe-

line, will test the robustness of the scoring system. But Uhlén is optimistic. “I see this as a preliminary scoring,” he says, “I think that for each application there should be at least a thorough discussion in due course, but these [scoring systems] are probably OK to start with.” In time, the portal can also be developed to accept recombinant affinity reagents and additional assays.

Submissions will be evaluated by a reviewer before being posted, but the system will rely on users to fine-tune the curation. Users will not be able to edit entries but will be encouraged to leave comments and flag validation data that cannot be reproduced.

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**RESEARCH PAPERS**

Björling, E. & Uhlén, M. Antibodypedia—a portal for sharing antibody and antigen validation data. *Mol. Cell Proteomics*, published online 29 July 2008.