

WEB WATCH

Towards a human protein atlas

- <http://www.hpr.se>

If you want to know where your favourite protein is expressed, look no further. A new database, dubbed the Human Protein Atlas, contains hundreds of thousands of images of protein expression in normal human tissues and cancer cells.

The Swedish Human Proteome Resource (HPR) programme has been set up to allow the systematic exploration of the human proteome with affinity (antibody) proteomics.

The basic concept of this resource centre is to produce specific antibodies to human target proteins using a high-throughput method that involves the cloning and expression of protein epitope signature tags.

The structure of the site is simple but colourful. At the top of the page, you'll find information about HPR, descriptions and annotations, as well as useful information on image-usage policies.

Available proteins (genes) can be reached through a specific search (by gene/protein name/id or classification, such as kinase or protease) or by browsing the individual chromosomes. The data are presented as high-resolution images representing immunohistochemically stained tissue sections.

Although the new atlas contains data from only 718 antibodies, the Swedish team is dedicated to tackling some 22,000 different proteins, one for each human gene. Their vision, as indicated on the Human Protein Atlas site, is "...to enable the systematic generation of quality assured antibodies to all non-redundant human proteins and to use these reagents to functionally explore human proteins, protein variants and protein interactions." So if you're struggling to visualize your 'pet' protein and you want to know when and where it is expressed, you'll certainly enjoy browsing the Human Protein Atlas.

Ekat Kritikou