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**Title:** *The Human Protein Atlas: Mapping the Building-blocks of Humans*

**Abstract:**

The Human Protein Atlas (HPA) is an international program with the aim to map of all the human proteins in cells, tissues and organs using integration of various omics technologies, including genomics, transcriptomics, antibody-based imaging, mass spectrometry-based proteomics and systems biology. The current version launched in September 2019 ([www.proteinatlas.org](http://www.proteinatlas.org)) consists of six separate parts, each focusing on a particular aspect of the genome-wide analysis of the human proteins; (1) the Tissue Atlas showing the distribution of the proteins across all major tissues and organs in the human body, (2) the Cell Atlas showing the subcellular localization of proteins in single cells, and (3) Pathology Atlas showing the impact of protein levels for survival of patients with cancer, (4) the Blood Atlas profiling the proteins and cells in blood, (5) the Brain Atlas mapping the genes expressed in the different regions of the brain and (6) the Metabolic Atlas annotating the presence of enzymes in the cell, tissue and organs of humans. All the data in the knowledge resource is open access to allow scientists both in academia and industry to freely access the data for exploration of the human proteome. The the implications for the understanding of human biology in health and disease will be discussed..

1. Uhlen et al (2015) *Science* 347: 1260419
2. Thul et al (2017) *Science* 356 (6340): eaal3321
3. Uhlen et al (2017) *Science* 357 (6352): eaan2507