

**Project 3.2.6 Supplement B:**

**List of Proteins**

Introduction

In Project 3.2.6 you will pick a protein as a starting point for searching a database. There are approximately 20,000 proteins encoded by the human genome. Here are a few proteins that might be interesting or familiar to you:

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| **Protein names** | Protein role in human organism |
| actin,  tubulin | create cytoskeleton |
| alcohol dehydrogenase | Protein that metabolizes alcohol |
| allatostatin,  proctolin | neuropeptides that regulate food intake and growth |
| atrial naturetic peptide,  atrial naturetic factor | hormones released by the heart |
| CCAP | neuropeptide that regulates heart rate |
| cholecystokinin,  gastrin | hormones released by the gastrointestinal tract |
| collagen,  elastin | structural proteins in cartilage |
| [dynorphin](http://en.wikipedia.org/wiki/Dynorphin)**,**  [cocaine-and amphetamine regulated transcript](http://en.wikipedia.org/wiki/Cocaine-and_amphetamine_regulated_transcript)(CART) | proteins associated with oxytocin |
| [enkephalin](http://en.wikipedia.org/wiki/Enkephalin) | proteins associated with serotonin |
| estrogen receptor-ER2 | protein that responds to estrogen |
| foxp2 | protein regulating certain genes, associated with language development |
| [galani](http://en.wikipedia.org/wiki/Galanin)n,  [enkephalin,](http://en.wikipedia.org/wiki/Enkephalin)  [neuropeptide Y](http://en.wikipedia.org/wiki/Neuropeptide_Y) | proteins associated with [norepinephrine](http://en.wikipedia.org/wiki/Norepinephrine) and noradrenaline |
| growth hormone-GH2,  prolactin-PRL | protein hormones secreted by pituitary gland |
| hemoglobin-alpha,  hemoglobin-beta | subunits of hemoglobin, which carries oxygen in red blood cells |
| insulin-INS,  somatostatin-SST | hormones released by the pancreas, important in diabetes and blood pressure |
| keratin | protein that forms hair, nails, hooves |
| leptin | hormone released by adipose (fat) tissue |
| myosin,  kinesin,  dynein | motor proteins creating forces in muscles |
| [neurotensin](http://en.wikipedia.org/wiki/Neurotensin) | protein associated with neurotransmitter dopamine |
| prothrombin | important in forming blood clots |
| rhodopsin medium wavelength | Protein in the eye that “sees” green light by changing shape after absorbing a green photon |
| [somatostatin](http://en.wikipedia.org/wiki/Somatostatin)**,**  [cholecystokinin](http://en.wikipedia.org/wiki/Cholecystokinin) | proteins associated with inhibitory neurotransmitter GABA |
| vasopressin-AVP,  oxytocin OXT | protein hormones secreted by pituitary gland that control maternal behavior and pair bonding |
| [VIP](http://en.wikipedia.org/wiki/Vasoactive_intestinal_peptide)**,**  [substance P](http://en.wikipedia.org/wiki/Substance_P) | proteins associated with neurotransmitter [acetylcholine](http://en.wikipedia.org/wiki/Acetylcholine) |