ESRF	Experiment title: Glutathione transferases. BAG: Uppsala (II)	Experiment number: LS-2187
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Report:

Glutathione is an abundant thiol that naturally serves in the protection of cells against reactive oxygen species and their secondary toxic products as well as other electrophilic compounds. Glutathione transferases (GSTs) are detoxication enzymes that catalyze the inactivation of a very broad range of such noxious chemical species. Many of the GST substrates are genotoxic and cause mutations and cancer. GSTs consequently have an anticarcinogenic function and the lack of adequate GST activity in an organism may predispose the individual to development of cancer. There is a number of different isoforms of GST and we are studying the alpha class.

Unlike the other alpha isoforms A3-3 is suggested to be involved in the testosterone and progesterone pathways. We have recently solved the A3-3 GST by MR. During this visit we collected a dataset on the mutant Y9F.