



	Experiment title: <b>Semicarbazide-sensitive amine oxidase</b> . <i>BAG: Uppsala (II)</i>	<b>Experiment number:</b> MX-133
<b>Beamline:</b> ID14-EH3	<b>Date of experiment:</b> from: 5 July 2003 to: 7 July 2003	<b>Date of report:</b> 2 September 2003
<b>Shifts:</b> 2	<b>Local contact(s):</b> Dr Elena MICOSSI (e-mail: micossi@esrf.fr)	<i>Received at ESRF:</i>

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**Report:**

**Human SSAO ( Semicarbazide-sensitive amine oxidase ) is a plasma membrane-anchored monoamine oxidase found in vascular and visceral smooth muscle cells, endothelial cells and adipocytes. A soluble circulating form of SSAO also exists. This enzyme catalyses the oxidation of primary amines to the corresponding aldehyde, hydrogen peroxide and ammonia. The resulting aldehydes from the deamination reaction, e g formaldehyde and methyglyoxal, are toxic. These reaction products are thought to contribute to the damage seen in the vasculature of diabetic patients, shown to have elevated levels of SSAO activity. Further the expression of SSAO is induced at sites of inflammation and it has been shown that SSAO mediates the lymphocyte entry to inflamed tissues.**

**A 4.5 Å data set was collected during this session. The data is very weak but hopefully it will help us to solve the structure.**