ESRF	**Experiment title:** Streptococcal antigen I/II Protein	**Experiment number:** BAG, LS-1658
Beamline: ID14-1	**Date of experiment:** from: February 4th, 2000 to: February 5th,2000	**Date of report:** 28/02/2000
Shifts: 2	**Local contact(s):** Hassan Belrhali	*Received at ESRF:*

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Report:

Antigen I/II proteins are expressed at the cell surface of oral streptococci and recognize a wide range of ligands, including other microbial cell receptors and human tissue proteins such as salivary receptors, matrix components and host cell surface receptors. They could play a presumptive role in the pathogenesis of various inflammatory disorders and could act as an opportunistic virulent factor. On the basis of their primary structure, proteins I/II can be divided into several domains. Streptococcal antigen I/II from *Streptococcus mutans* (serotype f) which contains 1556 residues is characterized by five structural regions: a leader sequence, an alanine-rich region (A region, residues 121 to 448), an extended V-region (residues 448 to 848), a proline-rich region (residues 848 to 964) and a wall-spanning domain.

We have cloned, purified and crystallized the V-domain which mediates interactions with carbohydrates residues on salivary ligands and on receptors expressed on the surface of the human epithelial cells. Crystals belong to space group $P6_322$ (unit cell parameters: a=b=124.5 Å, c=147.5 Å). A complete native data set has been recently collected at 2.5 Å (Rsym=0.059) resolution on ID14-1 (February 2000). Se-Met derivative crystals has now been obtained and will be used for solving the phases problem by MAD method.