| ESRF | **Experiment title:** BAG Barcelona - Human Astrovirus 2 (H-Ast2) | **Experiment number:** LS1522 |
|---|---|---|
| **Beamline:** ID14.2 | **Date of experiment:** from: 13-Feb-00 to: 15-Feb-00 | **Date of report:** 2-Aug-00 |
| **Shifts:** | **Local contact(s):** Laurence Dumon | *Received at ESRF:* |

**Names and affiliations of applicants** (* indicates experimentalists):

Nuria Verdaguer*, Research Scientist
Institut de Biologia Molecular de Barcelona CSIC
Jordi Girona, 18-26 08034-Barcelona (Spain)

Ignasi Fita*, Research Scientist
Institut de Biologia Molecular de Barcelona CSIC
Jordi Girona, 18-26 08034-Barcelona (Spain)

## Report:

Astroviruses are a group of non enveloped positive-stranded RNA viruses frequently associated with non bacterial gastroenteritis in humans and animals. Human astroviruses have a world wide distribution, but their real incidence has been probably underestimated because of the lack of sensitive diagnostic assays.

Crystals of Human Astrovirus serotype 2 have a triangular morphology and grow to approximately 150-200 μm at their largest dimension. These crystals were mounted in capillaries, because the failure of cryo-preservation and tested at the beam line ID14.2.

Crystals belong to the monoclinic space group P2 with a unit cell parameters a=505. A, b=394. A, c=881. A, β=108 ° and diffract to 8 A resolution. Crystals are stable in the X-ray beam for only one exposure.

Current status of the project : improvement of crystals in order to obtain better resolution for the next beam time.