

**Experiment title:**PROTEIN CRYSTALLOGRAPHY AT AFMB-CNRS,  
MARSEILLE**Experiment number:**

LS1657

**Beamline:**

BM14

**Date of experiment:**

from: 03.03.00 to: 04.03.00

**Date of report:**

Aug00

**Shifts:**

3

**Local contact(s):**

Andy THOMPSON

*Received at ESRF:***Names and affiliations of applicants (\* indicates experimentalists):**

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**Report:**

Protein name: MSA6OE7 anti bacterial VHH

Size: 12.000 Daltons, 116 aa

.Data collection of unliganded VHH MSA6OE7

Crystals were frozen to 100K, with 7% of MPD as cryoprotectant.

The crystals belong to the space group P3221, with dimensions

a=71.4 Å, b=71.4 Å c=74.84 Å alpha=beta=90 gamma=120.000.

A data set was collected to 100K, with an exposure time of

30 s per degree

.The 3-dimensional structure was determined with MR using as search model a dromedary single domain VHH antibody fragment against the Ribonuclease A (PDB code:1bzq). The refinement using CNS is underway.

Details of data collection and refinement are shown in the table below.

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|                                      |             |
|--------------------------------------|-------------|
| Total number of observation          | 192442      |
| number of unique reflections         | 11594       |
| overall % data > 1sigma (last shell) | 99.8(99.8)  |
| overall R-merge (%) (last shell)     | 4.0(19.5)   |
| overall I/sigma(I) (last shell)      | 15.0(3.5)   |
| resolution                           | 24.0-2.19 A |

refinement resolution: 20 - 2.2 A

|  |                   |
|--|-------------------|
| final Rfactor/Rfree                    | 0.2377/0.2781     |
| total number of refl. in resol. range: | 11559 ( 100.0 % ) |
| total number of reflections used:      | 11548 ( 99.9 % )  |
| number of reflections in working set:  | 10358 ( 89.6 % )  |
| number of reflections in test set:     | 1190 ( 10.3 % )   |
| number of protein atoms:               | 1005              |

rms deviations from ideal values:

|                      |       |
|----------------------|-------|
| Bonds (A):           | 0.012 |
| Angles (degree)      | 1.5   |
| Dihedral (degree)    | 26.4  |
| Improporper (degree) | 0.81  |
| B-factors (A2):      |       |
| main chains          | 30.2  |
| side chains          | 33.2  |
| Solvent              | 39.5  |

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