ESRF	**Experiment title:** A Number of Proteins from Bacteria to Eukarya and from Antarctic to Volcanic Areas	**Experiment number**: MX-71
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Shifts:	**Local contact(s)**: Dr. Steffi ARZT	*Received at ESRF:*

Names and affiliations of applicants (* indicates experimentalists):

Vito Calderone and Stefano Mangani

Dept. of Chemistry

University of Siena

via Aldo Moro, 1

53100 Siena

Report:

Several datasets have been collected on human MMP12 complexed with acetohydroxamic acid (1) and with antraquinone (2), on rat CutA1 (3) and on AphA complexed in turn with Au^{2+} (4), adenosine (5) and NAD (6) and on chlorocatechol dioxygenase (7). We have attempted to collect a MAD dataset on the latter crystals (7), but the qualit of the crystals was very poor. The data reported are relative the Fe remote wavelength which was the only one of sufficient quality for data processing.

Here are the data collection statistics for the best datasets.

1) Human MMP12 with acetohydroxamic:

Spacegroup: $P3_1$
Cell: 123.84 123.84 69.73 90.00 90.00 120.00
Resolution: 46-2.1
Unique reflections: 80485
R_{sym}: 0.082 (0.41)
$I/\sigma(I)$: 6.7 (1.9)
Completeness: 99.9 (99.9)
Multiplicity: 6.7 (4.6)

2) Human MMP12 with antraquinone:

Spacegroup: $P3_1$
Cell: 123.75 123.75 72.34 90.00 90.00 120.00
Resolution: 52-2.0
Unique reflections: 80325
R_{sym}: 0.12 (0.42)

I/σ(I): 4.1 (1.8)
Completeness: 99.7 (99.2)
Multiplicity: 4.5 (2.8)

3) Rat CutA1:

Spacegroup: $P2_12_12_1$
Cell: 66.92 88.46 125.57 90.00 90.00 90.00
Resolution: 73-2.5
Unique reflections: 29304
R_{sym}: 0.09 (0.52)
I/σ(I): 4.8 (1.7)
Completeness: 99.6 (97.1)
Multiplicity: 7.1 (5.3)

4) AphA with Au^{2+}:

Spacegroup: C2
Cell: 90.94 66.81 86.05 90.00 116.95 90.00
Resolution: 76-1.2
Unique reflections: 92073
R_{sym}: 0.082 (0.29)
I/σ(I): 4.4 (2.3)
Completeness: 94.4 (89.1)
Multiplicity: 2.7 (1.8)

5) AphA with adenosine:

Spacegroup: $P2_1$
Cell: 84.74 66.70 88.56 90.00 117.13 90.00
Resolution: 75-1.35
Unique reflections: 123342
R_{sym}: 0.08 (0.39)
I/σ(I): 4.1 (1.8)
Completeness: 92.2 (89.3)
Multiplicity: 2.9 (2.3)

6) AphA with NAD:

Spacegroup: C2
Cell: 90.25 67.31 91.55 90.00 120.95 90.0000
Resolution: 51-1.6
Unique reflections: 28449
R_{sym}: 0.24 (0.51)
I/σ(I): 2.2 (1.4)
Completeness: 64.9 (57.6)
Multiplicity: 2.1 (1.6)

7) Fe remote wavelength on chlorocatechol dioxygenase

Spacegroup: $P6_3$
Cell: 89.92 89.92 315.59 90.0 90.0 120.0
Resolution: 25.0 – 3.5
Unique reflections: 15823
R_{sym}: 0.14 (0.26)

I/σ(I): 7.3 (4.7)
Completeness: 88.8 (94.4)
Multiplicity: 2.1 (1.6)