ESRF	**Experiment title:** BAG CBS Montpellier	**Experiment number**: MX-330
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Shifts: 3	**Local contact(s)**: Celia Romao	*Received at ESRF:*

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1/. TR4

Data to 3.6 Å were collected on a crystal of the Testicular orphan receptor 4 homodimer. The crystal showed very anisotropic diffraction. A plausible molecular replacement solution could be found but refinement revealed to be problematic. We have now found new crystallisation conditions which will hopefully provide us with better crystals.

2/. NADK

16 NAD kinase crystal soaked with different substrates (NAD, NADP or ATP) at various soaking conditions were tested. Although 5 data sets were collected at resolutions of 3-3.5 Å, none of them showed a substrate. We are currently searching new crystallisation conditions for co-crystallisation.

3/. HIV-1 Nef soaked with an inhibitory peptide (#2)

10 Nef crystals soaked with different peptide concentrations, and flash-cooled using different cryoprotectants were tested; maximum resolution however was only 7 Å (compared to 2.9 Å for native crystals).

4/. HIV-1 Nef, containing mutations in its endocytosis motif

Background: Weak electron density observed in previous crystallographic analyses suggest that Nef hides its endocytosis motif in absence of a ligand by intra-molecular interactions. Nef mutants were designed to enhance the interaction between the endocytosis motif and the Nef core domain. 4 data sets were collected, the best diffracting to 2.45 Å (Rmerge = 0.0064, completeness = 95%). The structures were solved by molecular replacement; however the density for the endocytosis motif was only marginally improved. Based on these results, new mutants have been prepared.