

EPN BAG report
C1VAR sample
12-14 September 2022

C1VAR - *Polycomb* Repressive Complex 1

25,040 micrographs were collected, from which 23,047 resulted after manual curation. These 23,047 micrographs were split in smaller batches of 1,500 micrographs used for further processing tests. From 1,500 micrographs 3,028,072 particles were initially extracted. After 5 rounds of 2D classification, about 502,878 particles remained, distributed over 200 classes, revealing an apparent particle alignment problem not fully solved to date. Particles alignment issue seems mainly due to an 'unclean' background and a low signal to noise ratio / lower contrast of the acquired micrographs. Despite showing secondary structure features, the quality of the particle classes prevented improving the resolution to below 6 Å, and thus modeling the complex. Future work will focus on improving sample quality and structural stability to obtain near-atomic insights into this vital chromatin remodeling enzyme.