A sample containing human Thioredoxin reductase isoform 1 mixed with NADPH and an inhibitor compound has been vitrified on either UltrAuFoil and C-flat carbon grid. The data collection has been carried on both with the following conditions: camera type: Gatan K3; acquisition mode: counting; compression: TIFF LZW; gain normalized: yes; magnification: 105k; pixel size: 0.84 Å/pixel; electron dose: 18.3 electrons/pixel/s; exposure time: 1.55 s; total dose per movie: 40.2 electron/Å²; number of frames per movie: 40; defocus spread: -1.2 to -2.4 um in 0.2 um step; energy filter: Gatan Quantum LS; slit width: 20 eV; phase plate: no. The final dataset included roughly 22k images (about 18k from UltrAuFoil grid and 4k from C-flat carbon grid) and has been processed with Relion v4.0 installed onto an in-house workstation. A post-processed, CTF-refined structure at 3.1 Å resolution has been obtained. Analysis of the structure and assessment of the inhibitor presence is ongoing.