

# ParallelFold 2

```
/fs00/software/parallelfold/2.0-2.3.1/ParallelFold-v2.0-with-AlphaFold-v2.3.1.sif
```

```
#BSUB -J parafold
#BSUB -q gpu
#BSUB -n 16
#BSUB -gpu num=1

export OMP_NUM_THREADS="${LSB_DJOB_NUMPROC}"
export MKL_NUM_THREADS="${LSB_DJOB_NUMPROC}"

ALPHAFOLD_DATADIR=/fsb/data/alphafold/2
PARAFOLD_IMAGE=ParallelFold-v2.0-with-AlphaFold-v2.3.1.sif

PARAFOLD_APP=/app/ParallelFold

RUN_PARAFOLD="apptainer run --bind ${ALPHAFOLD_DATADIR}:${PARAFOLD_APP}/download \
    --nv ${PARAFOLD_IMAGE}"

${RUN_PARAFOLD} python ${PARAFOLD_APP}/run_alphafold.py --use_gpu_relax \
    --parameter_path=${PARAFOLD_APP}/download/params \
    --uniref90_database_path=${PARAFOLD_APP}/download/uniref90/uniref90.fasta \
    --mgnify_database_path=${PARAFOLD_APP}/download/mgnify/mgy_clusters_2022_05.fa \
    --
bfd_database_path=${PARAFOLD_APP}/download/bfd/bfd_metaclust_clu_complete_id30_c90_final_seq.sorted_opt \
    --pdb70_database_path=${PARAFOLD_APP}/download/pdb70/pdb70 \
    --uniref30_database_path=${PARAFOLD_APP}/download/uniref30/UniRef30_2021_03 \
    --template_mmcif_dir=${PARAFOLD_APP}/download/pdb_mmcif/mmcif_files \
    --obsolete_pdbs_path=${PARAFOLD_APP}/download/pdb_mmcif/obsolete.dat \
    --model_preset=monomer \
    --max_template_date=2022-10-1 \
    --db_preset=full_dbs \
    --output_dir=output \
    --fasta_paths=${PARAFOLD_APP}/input/input.fasta
```

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Revision #3

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