

Go-Docker: a blast example

Avec image `simonalpha/ncbi-blast-docker`

Sans montage

```
#!/bin/bash
```

```
# get the genome reference
```

```
curl -o Danio_rerio_genes_Zv9.fasta  
https://data-access.cesgo.org/index.php/s/1PRhWEtSK9v9wHD/download --insecure
```

```
# get the sequence to blast
```

```
curl -o sequences_COI.fasta  
https://data-access.cesgo.org/index.php/s/KdY6BCuClKtvfBX/download --insecure
```

```
# create blastdb
```

```
mkdir blastdb
```

```
makeblastdb -in Danio_rerio_genes_Zv9.fasta -parse_seqids -  
dbtype nucl -out blastdb/zv9 -title "Zv9"
```

```
#run blast
```

```
blastn -query sequences_COI.fasta -task megablast -db  
blastdb/zv9 -outfmt 7 -out megablast.out
```

Avec montage home dir

```
#!/bin/bash
```

```
mkdir $GODOCKER_HOME/blast_test/
```

```
# get the genome reference
```

```
curl -o $GODOCKER_HOME/blast_test/Danio_rerio_genes_Zv9.fasta  
https://data-access.cesgo.org/index.php/s/1PRhWEtSK9v9wHD/download --insecure
```

```
# get the sequence to blast
```

```
curl -o $GODOCKER_HOME/blast_test/sequences_COI.fasta  
https://data-access.cesgo.org/index.php/s/KdY6BCuClKtvfBX/download --insecure
```

```
# create blastdb
```

```
mkdir $GODOCKER_HOME/blast_test/blastdb
```

```
makeblastdb -in  
$GODOCKER_HOME/blast_test/Danio_rerio_genes_Zv9.fasta -  
parse_seqids -dbtype nucl -out  
$GODOCKER_HOME/blast_test/blastdb/zv9 -title "Zv9"
```

```
#run blast
```

```
blastn -query $GODOCKER_HOME/blast_test/sequences_COI.fasta -  
task megablast -db $GODOCKER_HOME/blast_test/blastdb/zv9 -  
outfmt 7 -out $GODOCKER_HOME/blast_test/megablast.out
```