

**Weighted Gene Co-Expression Network Analysis of the Salt-Responsive Transcriptomes Reveals Novel Hub Genes in Green Halophytic Microalgae Dunaliella salina**

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**Supplementary File S1: Python program to extract the geneID from the blastX result**

```
#!/usr/bin/python

# Usage get_geneID.py <blast output file>

# Python program to extract the geneID from the blastX result


import sys

def get_geneid():

    inFile = open(sys.argv[1], 'r')

    outFile = open("geneID.txt", 'w')




    outer_query = False
    inner_query = False
    first_newline = False
    topHit = False
    dt_name = ""

    for line in inFile.readlines():

        if outer_query == True and inner_query == True:
```

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if first_newline == True:

    if tophit == True:

        outer_query = False

        inner_query = False

        first_newline = False

        tophit = False

        continue

    else:

        geneid = line.split()[0].split('|')[3]

        outFile.write(dt_name + '\t' + geneid + '\n')

        tophit = True

elif line == '\n' and first_newline == False:

    first_newline = True

elif outer_query == True and 'Sequences producing significant alignments' in line:

    inner_query = True

elif 'Query=' in line:

    dt_name = line.strip().split()[-1]

    outer_query = True

inFile.close()

outFile.close()

if __name__=='__main__':
    if len(sys.argv) < 2:
```

```
print 'Invalid arguments!\n'  
sys.exit(0)  
  
get_geneid()  
print 'I am DONE. Please check the output. :)'
```