a
Pseudo-nitzschia
Planktoniella
Thalassiothrix
Thalassiosira
Other Pennates
Other Centrics
Unclassified Bacillariophyta
122
123
Metabarcode
Metagenome
Metatranscriptome
0.8-5 µm
5-20 µm
20-180 µm
180-2000 µm
0.8-2000 µm
b
Metagenome
Metatranscriptome
TARA_122
TARA_123
TARA_124
TARA_125
Fragilariophyceae
Mediophyceae
Coscinodiscophyceae
Bacillariophyceae
Asterionella
Staurosira
Lemnophora
Asterionellopsis
Grammatophora
Thalassiothrix
Ulnaria
Synedropsis
Pinnularia
Amphora
Entomoneis
Stauroneis
Fallacia
Eunotia
Nitzschia
Navicula
Pseudo-nitzschia
Tryblionella
Fragilariopsis
Didymosphenia
Bolidomonas
Leptocylindrus
Corethron
Rhizosolenia
Coscinodiscus
Aulacoseira
Stephanopyxis
Cyclotella
Attheya
Detonula
Thalassiosira
Chaetoceros
Skeletonema
Proboscia
Odontella
Triceratium
Ditylum
Lithodesmium
Helicotheca
Minutocellus
Extubocellulus
Eucampia
Cyclophora
Astrosyne
RPKM
0.01
0.1
0.5
c
Metagenome
Metatranscriptome
Bacillariophyceae
Pseudo-nitzschia
Coscinodiscophyceae
Thalassiosira
Ferredoxin
Flavodoxin
Ferritin
ISIP
Cytc_6
Plastocyanin
FBA_II
FBA_I
Cyclins
Si_transp
LHC
Proteorhodopsin
6.2e-06
3.6
1.4e+01
122
123
9.0e-06
3.0e+01
1.2e+02
d
Metagenome
Metatranscriptome
Bacillariophyceae
Pseudo-nitzschia
Coscinodiscophyceae
Thalassiosira
0
20
40
60
80
100
122
123
Ferredoxin
Flavodoxin
Ferritin
ISIP
Cytc_6
Plastocyanin
FBA_II
FBA_I
LHC
Proteorhodopsin