

## Nitrogen metabolism

<u>EC-number</u>	<u>Gene</u>	<u>Name</u>	<u>Pathway</u>
EC:1.18.6.1	<i>nifH</i>	Nitrogenase reductase	Nitrogen fixation
EC:1.7.2.1	<i>nirS/nirK</i>	Nitrite reductase	Denitrification
EC:1.7.2.5	<i>norB</i>	Copper nitrite reductase	Denitrification
EC:1.7.2.4	<i>nosZ</i>	Nitric oxyde reductase	Denitrification
EC:1.7.7.2	<i>narB</i>	Nitrous oxide reductase	Assimilatory nitrate reduction
EC:1.7.2.7	<i>hzsA</i>	Periplasmatic nitrate reductase	Annamox
EC:1.7.2.6	<i>hao</i>	Hydrazine synthase	Nitrification
EC:1.14.99.39	<i>amoA</i>	Ammonia monooxygenase	Nitrification
EC:1.7.2.2	<i>nrfA</i>	Nitrite reductase	Dissimilatory nitrate reduction to ammonium

## Sulfur metabolism

<u>EC-number</u>	<u>Gene</u>	<u>Name</u>	<u>Pathway</u>
EC:1.8.99.2	<i>aprA</i>	Adenylyl-sulfate reductase	Dissimilatory sulphate reduction
EC:1.8.99.5	<i>dsrA</i>	Dissimilatory sulfate reductase	Dissimilatory sulphite reduction
EC:1.8.4.8	<i>cysH</i>	Phosphoadenylyl-sulfate reductase	Assimilatory sulphate reduction
EC:3.1.6.20	<i>soxB</i>	Sulphate thiohydrolase	Sulphur oxydation

## Methane metabolism

<u>EC-number</u>	<u>Gene</u>	<u>Name</u>	<u>Pathway</u>
EC:1.14.18.3	<i>pmoA</i>	Particulate methane monooxygenase	Aerobic methane oxydation
EC:1.14.13.25	<i>mmoX</i>	Methane monooxygenase	Aerobic methane oxydation
EC:3.1.21.-	<i>mcrA</i>	Coenzyme M methyl reductase	Methanogenesis

## Photosynthesis

<u>EC-number</u>	<u>Gene</u>	<u>Name</u>	<u>Pathway</u>
EC:1.97.1.12	<i>psaA</i>	Reaction center PS I	Photosynthesis
EC:1.10.3.9	<i>psbA</i>	Reaction center PS II D1	Photosynthesis