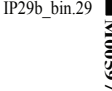


a

**b**

Nitrogen metabolism

M00175: Nitrogen fixation, Nitrogen $\longrightarrow$ Ammonia
M00524: FixL-FixJ (nitrogen fixation) two-component regulatory system
M00529: Denitrification, Nitrate $\longrightarrow$ Nitrogen
M00530: Dissimilatory nitrate reduction, Nitrate $\longrightarrow$ Ammonia
M00531: Assimilatory nitrate reduction, Nitrate $\longrightarrow$ Ammonia

Sulfur metabolism

M00596: Dissimilatory sulfate reduction, Sulfate $\rightarrow$ H₂S
M00176: Assimilatory sulfate reduction, Sulfate $\rightarrow$ H₂S
M00595: Thiosulfate oxidation by SOX complex, Thiosulfate Sulfate

Anoxygenic photosynthesis

M00597: Anoxygenic photosystem II