

plastoquinol-plastocyanin reductase

Cat. No. EXWM-0489

Lot. No. (See product label)

Introduction

Description

Contains two b-type cytochromes, two c-type cytochromes (cn and f), and a [2Fe-2S] Rieske cluster. The enzyme plays a key role in photosynthesis, transferring electrons from photosystem II (EC 1.10.3.9) to photosystem I (EC 1.97.1.12). Cytochrome c-552 can act as acceptor instead of plastocyanin, but more slowly. In chloroplasts, protons are translocated through the thylakoid membrane from the stroma to the lumen. The mechanism occurs through the Q cycle as in EC 1.10.2.2, quinol-cytochrome-c reductase (complex III) and involves electron bifurcation.

Synonyms

plastoquinol/plastocyanin oxidoreductase; cytochrome f/b6 complex; cytochrome b6f complex

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 7.1.1.6 (Formerly EC 1.10.9.1)

CAS No.

79079-13-3

Reaction

plastoquinol + 2 oxidized plastocyanin + 2 H+[side 1] = plastoquinone + 2 reduced plastocyanin + 4 H+[side 2]

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.