Creative Enzymes®

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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.