



# Recombinant *Synechococcus* sp. Deoxyribodipyrimidine photo-lyase (phr)

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| <b>Product Code</b>      | CSB-EP361494FPZ   |
| <b>Relevance</b>         | Involved in repair of UV radiation-induced DNA damage. Catalyzes the light-dependent monomerization (300-600 nm) of cyclobutyl pyrimidine dimers (in cis-syn configuration), which are formed between adjacent bases on the same DNA strand upon exposure to ultraviolet radiation.   |
| <b>Abbreviation</b>      | Recombinant <i>Synechococcus</i> sp. phr protein  |
| <b>Storage</b>           | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.   |
| <b>Uniprot No.</b>       | P05327  |
| <b>Alias</b>             | DNA photolyase Photoreactivating enzyme   |
| <b>Product Type</b>      | Recombinant Protein   |
| <b>Immunogen Species</b> | <i>Synechococcus</i> sp. (strain ATCC 27144 / PCC 6301 / SAUG 1402/1) ( <i>Anacystis nidulans</i> )   |
| <b>Purity</b>            | Greater than 90% as determined by SDS-PAGE.   |
| <b>Sequence</b>          | AAPILFWHRRDLRLSDNIGLAAARAQSAQLIGLFLCLDPQILQSADMAPARVAYL<br>QGCLQELQQRYYQQAGSRLLLLQGDQPQLHLPQLAQQLQAEAVYWNQDIEPYGR<br>DRDGQVAAALKTAGIRAVQLWDQLLHSPDQILSGSGNPYSVYGPFWKNWQA<br>QPKPTPVATPTELVDLSPEQLTAIAPLLLSELPTLTKQLGFDWDGGFPVEPGETA<br>AIARLQEFCDRAIADYDPQRNFP AEAGTSGLSPALKF GAIGIRQAWRAASAAHA<br>LSRSDEARNSIRVWQQELAWREFYQHLYHFPSLADGPYRSLWQQFPWENR<br>EALFTAWTQAQTGYPIVDAAMRQLTETGWMHNRCWMIVASFLT KDLIIDWRR<br>GEQFFMQHLVDGDLAANNGGWQWSASSGMDPKPLRIFNPASQAKKFDATAT<br>YIKRWLPELRHVHPKDLISGEITPIGRRGY PAPIVNHNL RQKQFKALYNQLKAAI<br>AEPEAEPDS |
| <b>Research Area</b>     | Epigenetics and Nuclear Signaling   |
| <b>Source</b>            | <i>E.coli</i>   |
| <b>Target Names</b>      | phr   |
| <b>Protein Names</b>     | Recommended name: Deoxyribodipyrimidine photo-lyase EC= 4.1.99.3<br>Alternative name(s): DNA photolyase Photoreactivating enzyme  |
| <b>Expression Region</b> | 2-484aa   |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.   |
| <b>Tag Info</b>          | N-terminal 10xHis-SUMO-tagged and C-terminal Myc-tagged   |
| <b>Mol. Weight</b>       | 74.3kDa   |

