

Supplementary Information contains analysis of and methods for detwinning of dCRY diffraction data (Fig. S1 to S4; ad Table S1); data collection and phasing statistic (Table S2), description of the dCRY crystallographic dimer, dCRY stability studies in cell culture (Fig. S5), dCRY stability studies in cell culture (Fig. S6), analysis of dCRY phosphorylation state (Fig. S7), structural comparison between dCRY and 6-4 photolyase (Fig. S8), sequence comparisons of Type I and II CRYs (Fig. S9), analysis of cofactor binding to dCRY (Fig. S10), structure comparison of MTHF binding sites in PL and CRY3 (Fig. S11), spectral data of dCRY photoreduction (Fig. S12), and detailed Materials and Methods (cloning and protein expression, crystallization, diffraction data collection, spectroscopy, CRY stability studies, and isothermal calorimetry).