Electronic Supplementary Material (ESI) for ChemComm.

Supporting Information 2, the underlying raw images of all electrophoresis data for

Photo-regulated genetic encoding of dibenzo[*c,g*][1,2]diazocine on Proteins via Configuration Switching

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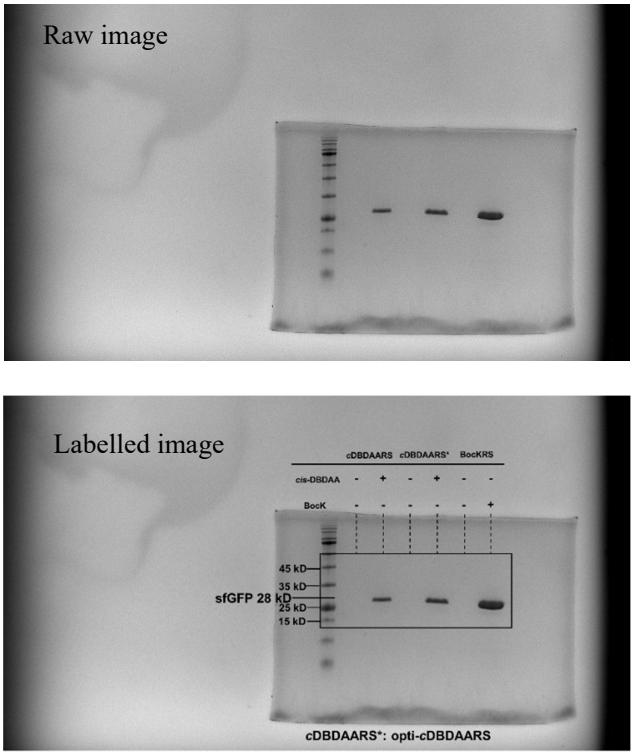

Figure 1b. The raw image for the SDS-PAGE analysis of purified sfGFP-Q204TAG expressed with *Mmc*DBDAARS, opti-*Mmc*DBDAARS or *Mm*BockRS in *E. coil*. Condition: *cis*-DBDAA 2 mM or BocK 2 mM, followed by Coomassie blue staining.

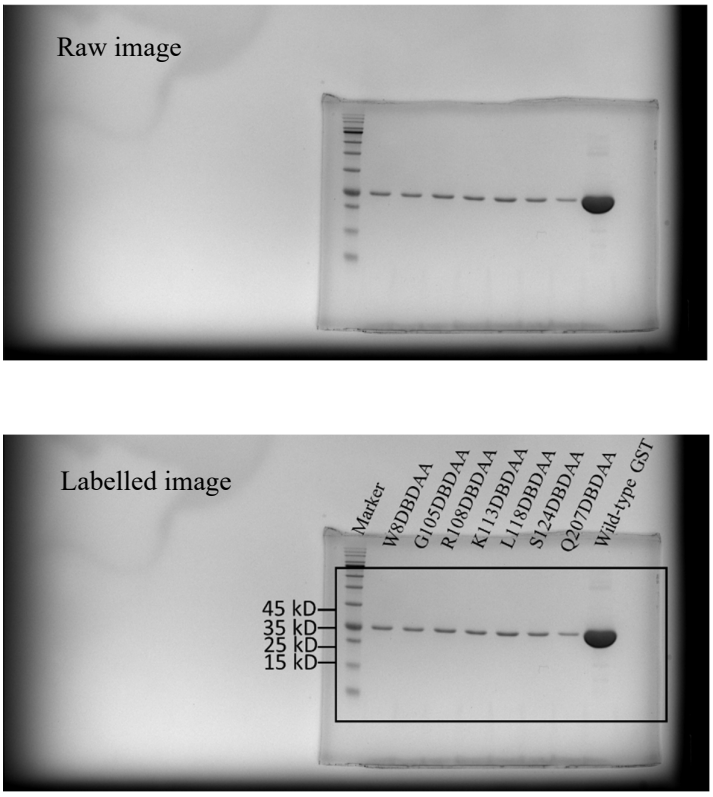

Figure 3b. The raw image for the SDS-PAGE analysis of purified *sj*GST-XTAG*c*DBDAA expressed with *Mmc*DBDAARS in *E. coil*. Condition: *cis*-DBDAA 2 mM, followed by Coomassie blue staining.

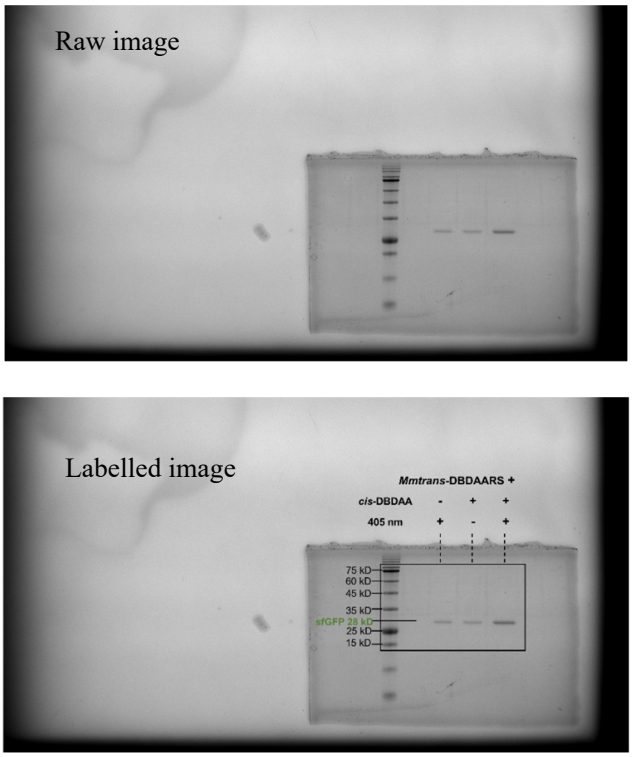

Figure 4d-1. The raw image for the SDS-PAGE imaging analysis of purified sfGFP-N149TAG expressed in the presence of 405 nm photo-stimulation without *cis*-DBDAA or in the presence of 2 mM *cis*-DBDAA in dark or in the presence of 405 nm photo-stimulation with 2 mM *cis*-DBDAA added, followed by Coomassie blue staining.

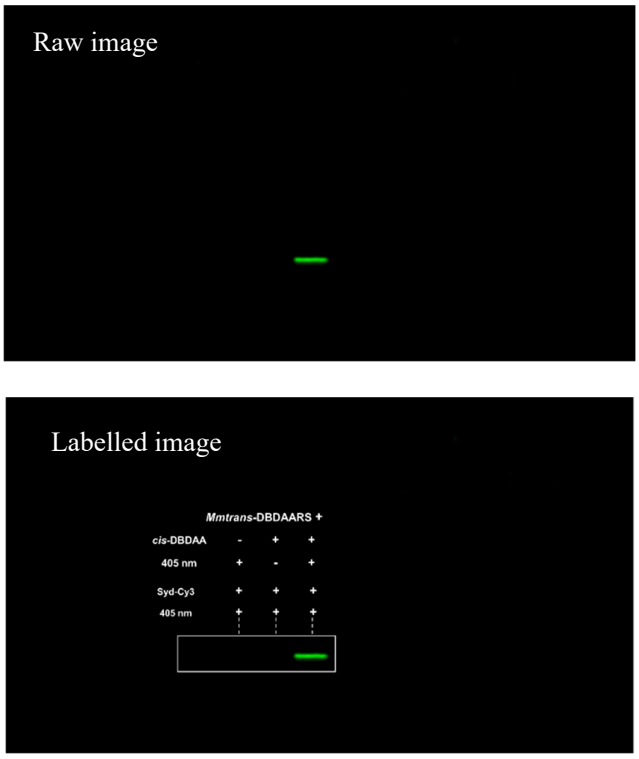

Figure 4d-2. The raw image for the in-gel fluorescence analysis after the photo-click decoration on purified sfGFP-N149TAG expressed in the presence of 405 nm photo-stimulation without *cis*-DBDAA, in the presence of 2 mM *cis*-DBDAA in dark or in the presence of 405 nm photo-stimulation with 2 mM *cis*-DBDAA added. The photo-click reaction conditions: 3 μM proteins and 30 μM Syd-Cy3 in PBS (pH = 7.4), 405 nm LED array (13.4 $mW \cdot cm^{-2}$) for 2 min, followed by resolving and in-gel fluorescence analysis.

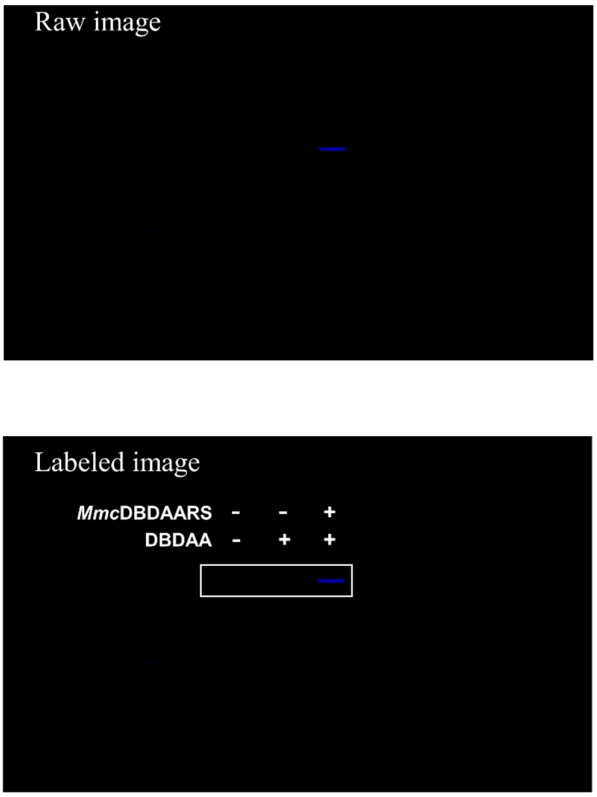

Figure S12c-1. The raw fluorescence imaging of the western blot (PVDF membrane) analysis to verify the full-length expression of EGFP. Protein samples were lysed from the HEK293T cells transfected without plasmid or *cis*-DBDAA, with only *p*EM-14E plasmid or with *p*EM-14E plasmid as well as 2 mM *cis*-DBDAA. The PVDF membrane was incubated with the anti-HA-tag mouse monoclonal antibody (1:500), followed by staining with a biotin-labelled Goat Anti-mouse IgG(H+L) secondary antibody (1:1000), which was further rendered as fluorescence bands by a NeutrAvidin Oregon Green^{TM} 488 conjugate.

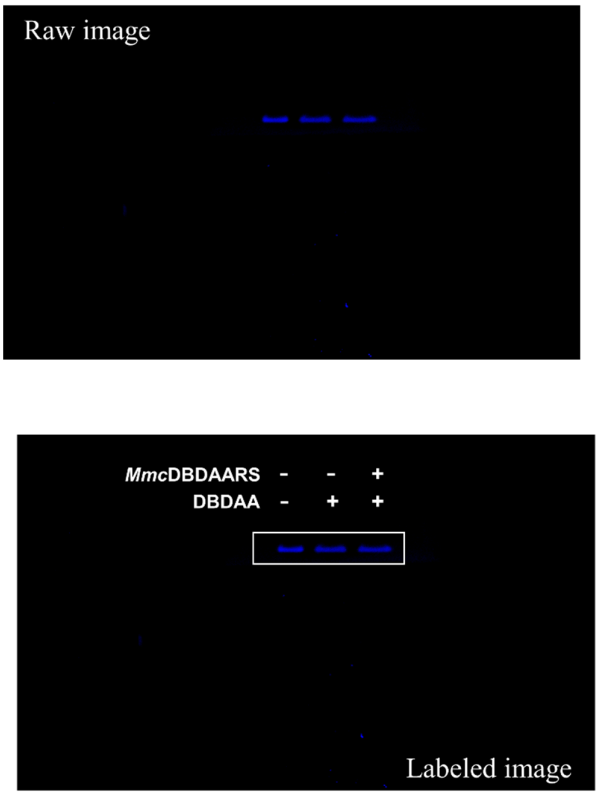

Figure S12c-2. The raw fluorescence imaging of the western blot (PVDF membrane) analysis for the β-Actin (housekeeping gene expression) as equal loading controls. Protein samples were lysed from the HEK293T cells transfected without plasmid or *cis*-DBDAA, with only *p*EM-14E plasmid or with *p*EM-14E plasmid as well as 2 mM *cis*-DBDAA. The PVDF membrane was incubated with the anti-β-Actin mouse monoclonal antibody (1:1000), followed by staining with a biotin-labeled Goat Anti-mouse IgG(H+L) secondary antibody (1:1000), which was further rendered as fluorescence bands by a NeutrAvidin Oregon Green^{TM} 488 conjugate.

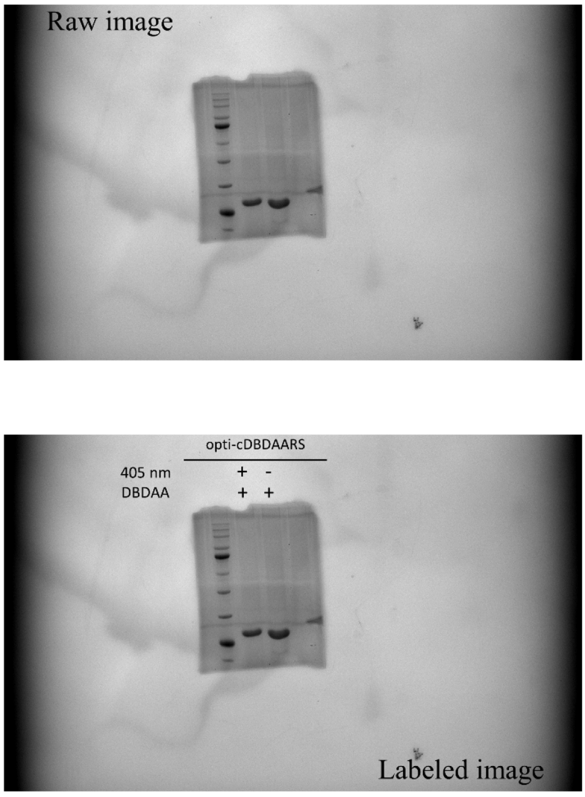

Figure S20. The raw image for the SDS-PAGE imaging for the purified sfGFP-Q204DBDAA expressed in the presence or absence of 405 nm stimulation. (Condition: 2.0 mM *cis*-DBDAA), followed by Coomassie blue staining.