

Anti-*E.coli* DNA Photolyase antibody, rabbit polyclonal

Product code	61-013
Size	200 µg
Storage	Store 4°C for short term For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Concentration	2.0 mg/ml
Buffer	PBS ⁻ with 50% glycerol
Purity	Purified IgG fraction with protein A from rabbit antiserum.
Immunogen	Recombinant full-size <i>E. coli</i> Cyclobutane Pyrimidine Dimer Photolyase
Isotype	Rabbit IgG
Reactivity	<i>E. coli</i> pyrimidine dimer photolyase.
Special notes	N/A
Application	1. Western blot (1/1,000) 2. Immunoprecipitation (1/200) 3. ELISA (assay dependent)
Background	Cyclobutane Pyrimidine Dimer photolyase (Deoxyribodipyrimidine photo-lyase) is 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. Upon absorption of visible light electrons are transferred from Trp-307 through Trp-360 to Trp-383, and from there to FADH, giving rise to the fully reduced catalytic FADH [•] . Length:472 aa. Mass (Da):53,667
Data Link	UniProtKB P00914 (PHR_ECOLI)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 61-013 Anti-*E.coli* DNA Photolyase antibody, rabbit polyclonal

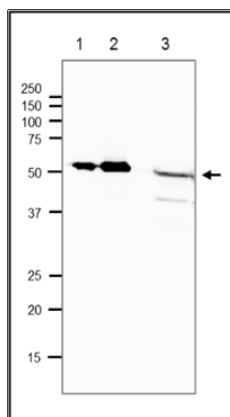


Fig.1 Western blot of *E. coli* photolyase

1. Purified Photolyase 8.4 ng
2. Purified Photolyase 42 ng
3. *E. coli* crude lysate, 40 µg

SDS-PAGE 12.5% gel. Blotting: 15 V, overnight, Blocking by 5% skim milk Anti-Photolyase antibody used at 1/1,000 dilution.

2nd antibody: Goat anti-rabbit IgG (H & L) (ab97051) used at 1/10,000.

Note that there are only 10-20 molecules of photolyase per *E.coli* cell.

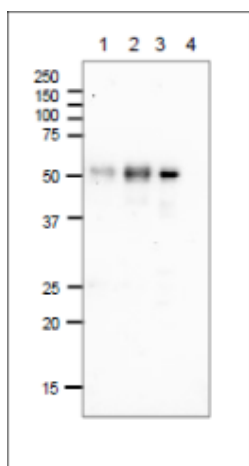


Fig 2 Immunoprecipitation of *E. coli* Photolyase

Immunoprecipitation was performed by using Dynabeads Magnetic system (Thermo Fisher).

1. *E. coli* AB1157 cell lysate (300 µg), antibody 2 µg
2. *E. coli* AB1157 cell lysate (300 µg), antibody 10 µg
3. Positive control: *E. coli* Photolyase purified, 4.2 µg, antibody 10 µg
4. Negative control: No sample, antibody 10 µg

Western blot: Anti-Photolyase antibody used at 1/1,000 dilution and as the second antibody, HRP conjugated goat anti-rabbit IgG VeriBlot for IP (ab131366) was used at 1/1,000 dilution.

References: This antibody has not been used in publication yet.

Related Product:

01-013. *E.coli* DNA Photolyase, functional