**BACKGROUND**

Plasmid vectors for the expression of coding regions of eukaryotic genes in bacterial, insect and mammalian hosts are in common usage; such expression vectors are frequently used to encode hybrid fusion proteins consisting of an eukaryotic target protein and a specialized region designed for fluorescent visualization of the fusion protein. DsRed is a red fluorescent protein cloned by homology to green fluorescent protein (GFP) from *Discosoma* coral. DsRed exhibits excellent resistance to pH extremes and photobleaching and causes a strong red-shift from 558 nm to 583 nm once matured. Immature DsRed shows GFP-like excitation and emission maxima. The contrast created through GFP and DsRed spectral shifts allows for a powerful dual reporter system.

**REFERENCES**


**SOURCE**

DsRed (E-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 178-223 at the C-terminus of DsRed of *Discosoma* Sp. origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

DsRed (E-8) is available conjugated to agarose (sc-390909 AC), 500 µg/0.25 ml agarose in 1 ml for WB; to HRP (sc-390909 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycocyanin (sc-390909 PE), fluorescein (sc-390909 FITC), Alexa Fluor® 488 (sc-390909 AF488), Alexa Fluor® 546 (sc-390909 AF546), Alexa Fluor® 594 (sc-390909 AF594) or Alexa Fluor® 647 (sc-390909 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390909 AF680) or Alexa Fluor® 790 (sc-390909 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390909 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**APPLICATIONS**

DsRed (E-8) is recommended for detection of proteins containing the DsRed tag by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of DsRed: 28 kDa.

**DATA**

![DsRed (E-8) sc-390909 Western blot analysis of purified recombinant DsRed](image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.