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BACKGROUND

2B8 epitope sequence **(RDPLPFFPP**, CGG GAC CCG TTG CCC TTT TTT CCA CCG) is the part of *Deinococcus radiodurans* Bacteriophytochromes (DrBphP). This monoclonal anti-2B8 antibody is highly specific to any protein containing minimal original epitope sequence (RDPLPFFPP). This antibody also react even better to a modified epitope sequence (RDPLPAFPP).

SOURCE

2B8 epitope is amino acid (3-11) sequence of *Deinococcus radiodurans* bacteriophytochrome (DrBphP, 75kDa). Anti-2B8 antibody was generated by immunizing purified DrBphP protein into mouse.

PRODUCT

Each vial contains 100 μg IgG (monoclonal) in 200 μl of PBS with <0.1% sodium azide, 30% glycerol

Specific to the peptide of RDPLPFFPP or RDPLPAFPP.

* Control protein:

purified 2B8 tagged GFP protein (~28 kDa), use 5~10 μl for western blot.

APPLICATIONS

Anti-2B8 antibody is recommended for detection of RDPLPFFPP or RDPLPAFPP peptide tagged fusion proteins by Western Blot, starting dilution with 1:5,000 (dilution range is 1:5,000~1:20,000), Immunoprecipition [~5 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:1,000~1:10,000). Chromatine immunoprecipitation(ChIP)

STORAGE

Store at -20°C. Stable up to two year from the date of shipment. Non-hazardous. No MSDS required.

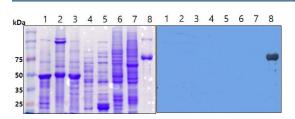
SELECT PRODUCT CITAIONS

1. Choi HR, Kim TL, Cho MH, **Bhoo SH** (2017) Immunoaffinity purification of 2B8-tagged proteins. **Appl. Biol. Chem.** 60(5): 563-568.

2. Kim TL, Cho MH, Sangsawang K, **Bhoo SH** (2016) Fine Mutational Analysis of 2B8 and 3H7 Tag Epitopes with Corresponding Specific Monoclonal Antibodies. **Mol Cells.** 39(6): 460-467.

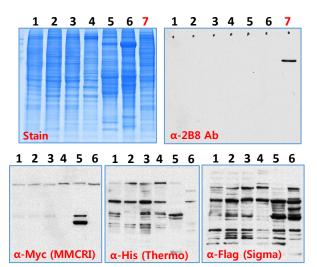
3. Kim TL, Yoo J, Sangsawang K, Cho MH, Yang SH, Suh JW, Hahn TR, **Bhoo SH** (2014) Epitope mapping of monoclonal antibodies for the Deinococcus radiodurans bacteriophytochome. **Protein Sci.** 23(6): 812-818.

Product research DATA



Specificity test of anti-2B8 antibody to total proteins of various organisms.

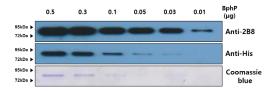
Coomassie blue staining(left) and Western blotting(right) analysis against various model organisms. 1: Rice; 2: *Nicotiana benthamiana;* 3: *Arabidopsis thaliana;* 4: Saccharomyces cerevisiae; 5: *E.coli;* 6: *Dorosophila melanogaster S2;* 7: Pre–B cell PD36; 8: purified DrBphP(control). Anti-2B8 antibody has no non-specific immune responses to total proteins of tested organisms.



Specificity test of anti-2B8 antibody to total proteins of various human cell lines.

1. HEK-293(Human kidney) 2. HepG2(Human liver) 3. C33A(Human cervix) 4. CRL-2302(Human eye) 5. Human-hepatocyte 6. Mouse-hepatocyte 7. 2B8-Sox9 expressed HEK-293 total protein

Anti-2B8 antibody has no non-specific immune responses to total proteins of tested human cell lines.



Western blot analysis of His6 tagged BphP with anti-2B8 antibody and anti-His6 antibody.

100µg/100µl concentration of anti-2B8 and anti-His6 antibodies were used to detect His6 tagged BphP. Primary antibodies were diluted same rate (1:5,000).