

POP(2B8) Ab (#JTB-A001)

(Monoclonal, 100 µg/ 0.1 ml)

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www.POPtagAb.com
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BACKGROUND

POP (Phytochrome-Originated Peptide) epitope sequence (RDPLPFFPP, CGG GAC CCG TTG CCC TTT TTT CCA CCG) is a part of *Deinococcus radiodurans* Bacteriophytochrome (DrBphP). This monoclonal anti-POP antibody is highly specific to any protein containing minimal original epitope sequence (RDPLPFFPP).

SOURCE

POP epitope is amino acid sequence (3-11) of *Deinococcus radiodurans* bacteriophytochrome (DrBphP, 75kDa). POP(2B8) antibody has been generated by immunizing the purified DrBphP protein into mice.

APPLICATIONS

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

STORAGE

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

PRODUCT (Not intended for clinical use.)

* POP(2B8) Ab :

Each vial contains 100 µg IgG (monoclonal,HC:lgG2a/LC:κ) in 100 µl of PBS with < 0.1% sodium azide, 30 % glycerol.

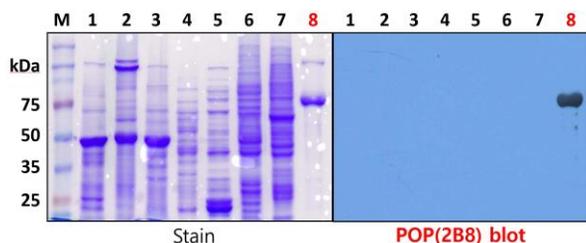
* Included Positive control protein :

Purified POP(2B8) tagged GFP protein (~28 kDa, SDS sample buffer added – ready to use). Use 5 µl for Western blot.

SELECT PRODUCT CITATIONS

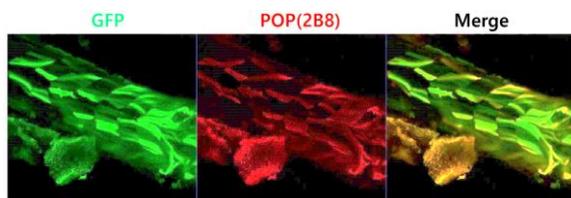
1. Yang Y, Hwang H, Im JE, Lee K, Bhoo SH, Yoo JS, Kim YH, Kim JY (2021) Flashlight into the Function of Unannotated C11orf52 using Affinity Purification Mass Spectrometry. **Proteome Res.** 20: 5340-5346.
2. Choi HR, Kim TL, Cho MH, Bhoo SH (2017) Immuno-affinity purification of 2B8-tagged proteins. **Appl. Biol. Chem.** 60(5): 563-568.
3. 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.
4. 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* bacteriophytochrome. **Protein Sci.** 23(6): 812-818.

Product Research Data

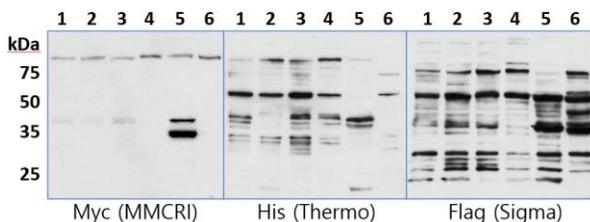
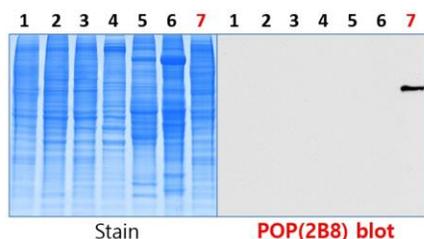


Specificity test of POP(2B8) Ab to total proteins of various organisms.

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 : *Drosophila melanogaster S2*; 7 : Pre-B cell PD36; 8 : Purified DrBphP(control). POP(2B8) Ab has no non-specific immune response to total proteins of tested organisms.



Immunofluorescence image showing mosaic *ubb:POP(2B8)-EGFP* expression in the trunk of a 4-dpf zebrafish larva. (Courtesy of Dr. Shin, Univ. of Pittsburgh).



Specificity test of POP(2B8) Ab 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 : POP(2B8)-Sox9 expressed HEK-293 lysate.

POP(2B8) Ab has no non-specific immune response to total proteins of tested human cell lines.