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

(Monoclonal, 100 µg/ 0.1 ml)

www.POPtagAb.com

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 mouse.

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), Immunoprecipition [~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 ℃. Stable up to one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 100 µg IgG (monoclonal,HC:*IgG2a*/LC:κ) in 100 µl of PBS with < 0.1% sodium azide, 30 % glycerol.

*** Control protein :**

Purified POP tagged GFP protein (~28 kDa). Use 5 µl for Western blot.

SELECT PRODUCT CITATIONS

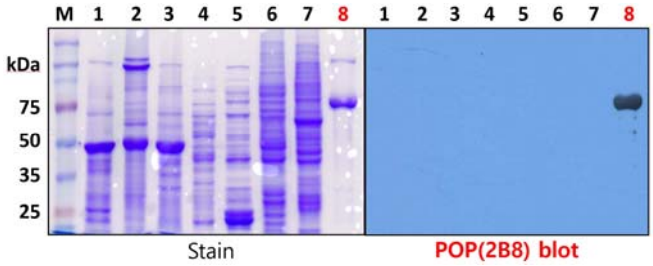
1. Recombinant haemostatic protein for therapeutic substitution of platelet function via tripartite haemostatic mechanisms in thrombocytopenic male mice. Lim CG et. al. **Nat. Commun. (2026)** 17(1) : 4702.

2. HDAC6 regulates BACE1 stability and NLRP3 inflammaso me activation in Alzheimer's disease. Lee J et. al. **Brain. (2026)** 00: 1-15.

3. A Small Epitope Tagging on the C-Terminus of a Target Protein Requires Extra Amino Acids to Enhance the Immun e Responses of the Corresponding Antibody. Lee K et. al. **J. Microbiology. (2024)** 13;34(6):1222-1228.

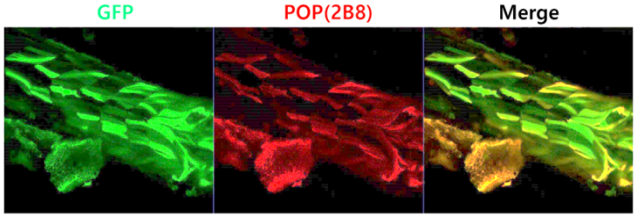
4. HYL1-CLEAVAGESUBTILASE1(HCS1) suppresses miRNA biogenesis in response to light-to-dark transition. Jung HJ et. al. **Proc Natl Acad Sci. USA. (2022)** 119(6).

Product Research Data

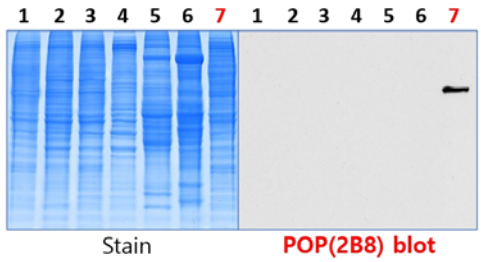


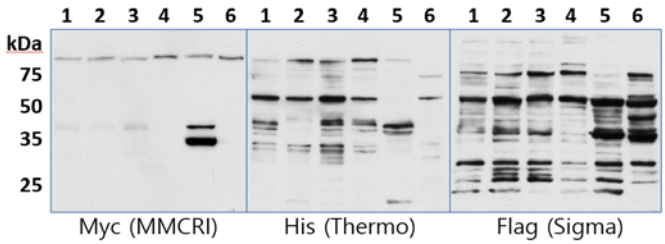
Specificity test of POP(2B8) Ab to total proteins of various organisms.

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 : *Dorosophila 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.