

POLYCLONAL ANTIBODY

# Anti-V5-tag pAb-Agarose

Code No.  
PM003-8

Quantity  
Gel: 200  $\mu$ L

**BACKGROUND:** Expression vectors containing a protein and a tag peptide are commonly used. V5-tag fusion protein expression system is preferably used in various laboratories. This specific antibody for V5-tag fusion protein is a useful tool for monitoring of the fusion protein expression and affinity purification.

**SOURCE:** This antibody was purified from rabbit serum using affinity column. The rabbit was immunized with carrier protein (CP) conjugated synthetic peptide, CP-GKPIPPELLGLDST.

**FORMULATION:** 400  $\mu$ g of anti-V5-tag polyclonal antibody covalently coupled to 200  $\mu$ L of agarose gel and provided as a 50% gel slurry suspended in PBS containing preservative (0.09% sodium azide) for a total volume of 400  $\mu$ L.

\*Azide may react with copper or lead in plumbing system to form explosive metal azides. Therefore, always flush plenty of water when disposing materials containing azide into drain.

**STORAGE:** This antibody is stable for one year from the date of purchase when stored at 4°C.

**REACTIVITY:** This antibody recognizes V5-tag peptide sequence (GKPIPPELLGLDST) on Immunoprecipitation.

## APPLICATIONS:

Western blotting; Not tested  
Immunoprecipitation; 20  $\mu$ L of gel slurry  
Immunohistochemistry; Not tested  
Immunocytochemistry; Not tested  
Flow cytometry; Not tested

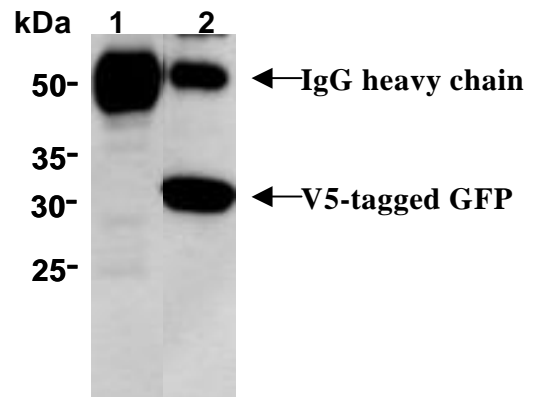
Detailed procedure is provided in the following **PROTOCOL**.

## INTENDED USE:

For Research Use Only. Not for use in diagnostic procedures.

## REFERENCES:

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*Immunoprecipitation of V5-Tag from V5 tagged GFP protein with rabbit IgG (1) and PM003-8 (2). After immunoprecipitated with the antibody, immunocomplex was resolved on SDS-PAGE and immunoblotted with PM003.*

## PROTOCOL:

### Immunoprecipitation

- 1) Add primary antibody as suggested in the **APPLICATIONS** into 1  $\mu$ g protein in 100  $\mu$ L of Lysis buffer [50 mM Tris-HCl (pH 7.5), 150 mM NaCl, 0.05% NP-40] containing appropriate protease inhibitors. Mix well and incubate with gentle agitation for 30-120 minutes at 4°C.
- 2) Centrifuge the tube at 2,500 x g for 10 seconds, and carefully discard the supernatant using a pipettor without disturbing the beads.
- 3) Resuspend the beads with cold Lysis buffer.
- 4) Centrifuge the tube at 2,500 x g for 10 seconds, and carefully discard the supernatant.
- 5) Repeat steps 3)-4) 3-5 times
- 6) Resuspend the agarose in 20  $\mu$ L of Laemmli's sample buffer, boil for 3-5 minutes, and centrifuge for 5 minutes.
- 7) Load 20  $\mu$ L of the sample per lane in a 1-mm-thick SDS-polyacrylamide gel for electrophoresis.
- 8) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm<sup>2</sup> for 1 hour in a semi-dry transfer system (Transfer Buffer: 25 mM Tris, 190 mM glycine, 20% methanol). See the manufacturer's manual for precise transfer procedure.
- 9) To reduce nonspecific binding, soak the membrane in 5% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature, or overnight at 4°C.
- 10) Incubate the membrane with 1:1,000 of Anti-V5-tag pAb (MBL, code no. PM003) diluted with 1% skimmed milk

(in PBS, pH 7.2) for 1 hour at room temperature. (The concentration of antibody to be used will depend on the conditions.)

- 11) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (5 minutes x 3).
- 12) Incubate the membrane with 1:10,000 of Anti-IgG (Rabbit) pAb-HRP (MBL, code no. 458) diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature.
- 13) Wash the membrane with PBS-T (5 minutes x 3).
- 14) Wipe excess buffer on the membrane, then incubate it with appropriate chemiluminescence reagent for 1 minute. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
- 15) Expose to an X-ray film in a dark room for 5 minutes. Develop the film as usual. The condition for exposure and development may vary.

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