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



#### POLYCLONAL ANTIBODY

# Anti-VSV-G-tag pAb-Agarose

Code No. Quantity
563-8 Gel: 200 μL

BACKGROUND: Epitope tagging has widely been accepted technique that fuse an epitope peptide to a certain protein as a marker for gene expression. With this technique, the gene expression can be easily monitored on western blotting, immunoprecipitation and immunofluorescence utilizing with an antibody that recognizes such an epitope. Amino acid sequences that are widely used for the epitope tagging are as follow; YPYDVPDYA (HA-tag), EQKLISEEDL (Myc-tag) and YTDIEMNRLGK (VSV-G-tag), which corresponding to the partial peptide of Influenza hemagglutinin protein, human c-myc gene product and Vesicular stomatitis virus glycoprotein respectively.

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

**FORMULATION:** 430 μg of anti-VSV-G-tag polyclonal antibody covalently coupled to 200 μL 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 μL.

\*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 VSV-G-tag peptide sequence (YTDIEMNRLGK) on Immunoprecipitation.

### **APPLICATIONS:**

Western blotting; Not tested

Immunoprecipitation; 20 μL of gel slurry Immunohistochemistry; Not tested Immunocytochemistry; Not tested Flow cytometry; Not tested

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

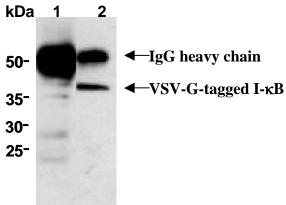
#### **INTENDED USE:**

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# **REFERENCES:**

- 1) Patterson, A. M., et al., Inflamm. Bowel Dis. 18, 1112-1126 (2012)
- 2) Smetsers, T. F., et al., Cancer Res. 63, 2965-2970 (2003)
- 3) Fanning, A. S., et al., FASEB J. 16, 1835-1837 (2002)
- 4) Nix, S. L., et al., J. Biol. Chem. 275, 41192-41200 (2000)
- 5) Okada, Y., et al., J. Biol. Chem. 275, 17016-17023 (2000)

This antibody is used in these references.



Immunoprecipitation of VSV-G-Tag from 293T/VSV-G tagged I-κB with rabbit IgG (1) and 563-8 (2). After immunoprecipitated with the antibody, immunocomplex was resolved on SDS-PAGE and immunoblotted with 563.

#### PROTOCOL:

#### **Immunoprecipitation**

- 1) Wash the cells 3 times with PBS and suspend with 10 volume of cold Lysis buffer (50 mM Tris-HCl pH 7.5, 150 mM NaCl, 0.05% NP-40) containing appropriate protease inhibitors. Incubate it at 4°C with rotating for 30 minutes, then sonicate briefly (up to 10 seconds).
- 2) Centrifuge the tube at 12,000 x g for 10 minutes at 4°C and transfer the supernatant to another tube.
- 3) Add agarose as suggest in the **APPLICATIONS** into 100 μL of cell extract. Mix well and incubate with gentle agitation for 30-120 minutes at 4°C.
- 4) Wash the beads 3-5 times with the cold Lysis buffer (centrifuge the tube at 2,500 x g for 10 seconds).
- 5) Resuspend the agarose in 20 μL of Laemmli's sample buffer, boil for 3-5 minutes, and centrifuge for 5 minutes.
- 6) Load 20  $\mu L$  of the sample per lane in a 1-mm-thick SDS-polyacrylamide gel for electrophoresis.

- 7) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm² for 1 hour in a semi-dry transfer system (Transfer Buffer: 25 mM Tris, 190 mM glycine, 20% MeOH). See the manufacturer's manual for precise transfer procedure.
- 8) 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.
- 9) Incubate the membrane with the 1:1,000 anti-VSV-G-tag polyclonal antibody (MBL; code no. 563) diluted with PBS, pH 7.2 containing 1% skimmed milk for 1 hour at room temperature. (The concentration of antibody to be used will be depend on condition.)
- 10) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (5 minutes x 3 times).
- 11) Incubate the membrane with the 1:10,000 HRP-conjugated anti-rabbit IgG (MBL; code no. 458) diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature.
- 12) Wash the membrane with PBS-T (5 minutes x 3 times).
- 13) 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.
- 14) 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.

# **RELATED PRODUCTS:**

#### Antibodies

563 anti-VSV-G-tag (polyclonal) 563-8 anti-VSV-G-tag-agarose (polyclonal) 561-8 anti-HA-tag-agarose (polyclonal) PM020-8 anti-DDDDK-tag-agarose (polyclonal) anti-His-tag-agarose (OGHis) D291-8 PM032-8 anti-His-tag-agarose (polyclonal) anti-GFP-agarose (RQ2) D153-8 anti-RFP-agarose (3G5) M165-8 M047-8anti-Myc-tag-agarose (PL14) PM021-8 anti-S-tag-agarose (polyclonal) anti-T7-tag-agarose (polyclonal) PM022-8 PM003-8 anti-V5-tag-agarose (polyclonal)

# Smart-IP series

3190	Magnetic Rack
M185-9	anti-DDDDK-tag-Magnetic beads (FLA-1)
D291-9	anti-His-tag-Magnetic beads (OGHis)
D153-9	anti-GFP-Magnetic beads (RQ2)
M165-9	anti-RFP-Magnetic beads (3G5)
M132-9	anti-HA-tag-Magnetic beads (5D8)
M180-9	anti-HA-tag-Magnetic beads (TANA2)
M047-9	anti-Myc-tag-Magnetic beads (PL14)
M167-9	anti-V5-tag-Magnetic beads (1H6)
D058-9	anti-Multi Ubiquitin-Magnetic beads (FK2)

# Protein Purification Kit

3305	c-Myc-tagged Protein Mild Purification Kit
3305A	c-Myc-tagged Protein Mild Purification Kit (Trial Kit)
3306	c-Myc-tagged Protein Mild Purification Gel with

	Elution Peptide (1 mL gel, 1 mg peptide)
3307	c-Myc-tagged Protein Mild Purification Gel with
	Elution Peptide (5 mL gel, 5 mg peptide)
3300-205	c-Myc-tag peptide (5 mg)
3310	His-tagged Protein Purification Kit
3310A	His-tagged Protein Purification Kit (Trial Kit)
3310-205	His-tag peptide (10mg)
3311	His-tagged Protein Purification Gel with Elution
	Peptide (1 mL gel, 10 mg peptide)
3312	His-tagged Protein Purification Gel with Elution
	Peptide (5 mL gel, 50 mg peptide)
3315	V5-tagged Protein Purification Kit
3315A	V5-tagged Protein Purification Kit (Trial Kit)
3320	HA-tagged Protein Purification Kit
3320A	HA-tagged Protein Purification Kit (Trial Kit)
3320-205	HA-tag peptide (10 mg)
3321	HA-tagged Protein Purification Gel (1 mL)
3325	DDDDK-tagged Protein Purification Kit
3325A	DDDDK-tagged Protein Purification Kit (Trial Kit)
3325-205	DDDDK-tag peptide (5 mg)
3326	DDDDK-tagged Protein Purification Gel with
	Elution Peptide (1 mL gel, 5 mg peptide)
3327	DDDDK-tagged Protein Purification Gel with
	Elution Peptide (5 mL gel, 25 mg peptide)
3328	DDDDK-tagged Protein Purification Gel (5 mL gel)
3329	DDDDK-tagged Protein Purification Gel (25 mL gel)

Other related antibodies and kits are also available. Please visit our website at https://ruo.mbl.co.jp/