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



## Anti-ZBTB24 pAb

CODE No. PM085

**CLONALITY** Polyclonal

**ISOTYPE** Guinea Pig Ig, affinity purified

**QUANTITY** 100 μL

**SOURCE** Purified Ig from guinea pig serum

**IMMUNOGEN** Recombinant mouse ZBTB24 (C-terminus)

**FORMULATION** PBS containing 50% Glycerol (pH 7.2). No preservative is contained.

**STORAGE** This antibody solution is stable for one year from the date of purchase when stored at -20°C.

#### APPLICATIONS-CONFIRMED

Western blotting 1:1,000

Immunoprecipitation  $2 \mu L/300 \mu L$  of cell extract from 1 x  $10^6$  cells/sample

#### SPECIES CROSS REACTIVITY on WB

Species	Human	Mouse	Rat	Hamster
Cells	SBC5, MCF7	E14 ES cell	Not tested	Not tested
Reactivity	+	+		

**Entrez Gene ID** 9841 (Human), 268294 (Mouse)

**REFERENCES** 1) Nitta, H., et al., J. Hum. Genet. **58**, 455-460 (2013)

2) Weemaes, C. M., et al., Eur. J. Hum. Genet. 21, 1219-1225 (2013)

3) Cerbone, M., et al., Am. J. Med. Genet. A. 158A, 2043-2046 (2012)

4) Chouery, E., et al., Clin. Genet. 82, 489-493 (2012)

5) de Greef, J. C., et al., Am. J. Hum. Genet. 88, 796-804 (2011)

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The descriptions of the following protocols are examples. Each user should determine the appropriate condition.

<sup>\*</sup>Immunoprecipitation for human sample is not recommended.

#### **SDS-PAGE & Western blotting**

- 1) Wash 5 x 10<sup>6</sup> cells 3 times with PBS and resuspend them in 250 μL of Extraction buffer [20 mM Tris-HCl (pH 7.4), 150 mM NaCl, 0.5% NP-40], then sonicate for 30 sec.
- 2) Add equal volume of 2 x Laemmli's sample buffer, then boil for 5 min.
- 3) Load 10 µL of the sample per lane in a 1-mm-thick SDS-polyacrylamide gel (7.5% acrylamide) for electrophoresis.
- 4) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm<sup>2</sup> for 1 hr. 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.
- 5) To reduce nonspecific binding, soak the membrane in 5% skimmed milk (in PBS, pH 7.2) for 1 hr. at room temperature.
- 6) Wash the membrane with PBS-T [0.05% Tween-20 in PBS] (5 min. x 3 times).
- 7) Incubate the membrane with primary antibody diluted with 1% skimmed milk (in PBS, pH 7.2) as suggested in the **APPLICATIONS** for 1 hr. at room temperature. (The concentration of antibody will depend on the conditions.)
- 8) Wash the membrane with PBS-T (5 min. x 3 times).
- 9) Incubate the membrane with 1:20,000 of anti-guniea pig IgG-HRP (Life Technologies; code no. 61-4620) diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hr. at room temperature.
- 10) Wash the membrane with PBS-T (5 min. x 3 times).
- 11) Wipe excess buffer on the membrane, then incubate it with ECL<sup>TM</sup> Western Blotting Detection Reagents (GE Healthcare; code no. RPN2106) for 1 min. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
- 12) Expose to an X-ray film in a dark room for 10 min. Develop the film as usual. The condition for exposure and development may vary.

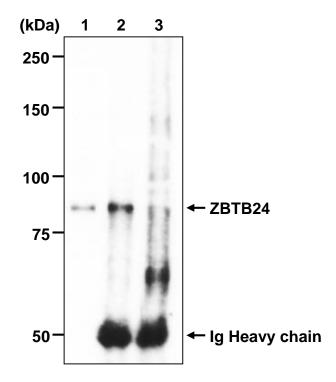
(Positive controls for Western blotting; Mouse E14 ES cell, SBC5 and MCF7)



#### **Immunoprecipitation**

- 1) Wash 3 x 10<sup>6</sup> cells 3 times with PBS and resuspend them in 1 mL of RIPA buffer (25 mM Tris-HCl pH 7.4, 150 mM NaCl, 1% NP-40, 0.1% SDS) and 10 μL of Protease Inhibitor Cocktail (Sigma; code no. P8340), then sonicate for 30 sec.
- 2) Centrifuge the tube at 12,000 x g for 5 min. at 4°C and transfer the supernatant to another tube.
- 3) Mix 30  $\mu$ L of 50% protein A agarose beads slurry resuspended in 300  $\mu$ L of PBS with primary antibody as suggested in the **APPLICATIONS**. Incubate with gentle agitation for 1 hr. at 4°C.
- 4) Wash the beads 3 times with 1 mL of PBS-T (0.05% Tween-20 in PBS).
- 5) Add 300 μL of cell lysate (prepared sample from step 2)). Incubate with gentle agitation for 1 hr. at 4°C.
- 6) Wash the beads 3 times with 1 mL of PBS-T.
- 7) Resuspend the beads in 20 µL of Laemmli's sample buffer, boil for 5 min. and centrifuge.
- 8) Load 10 µL of the sample per lane in a 1-mm-thick SDS-polyacrylamide gel (7.5% acrylamide) for electrophoresis.
- 9) Blot the protein to a polyvinylidene difluoride (PVDF) membrane at 1 mA/cm<sup>2</sup> for 1 hr. 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.
- 10) To reduce nonspecific binding, soak the membrane in 5% skimmed milk (in PBS, pH 7.2) for 1 hr. at room temperature.
- 11) Wash the membrane with PBS-T (5 min. x 3 times).
- 12) Incubate the membrane with primary antibody diluted with 1% skimmed milk (in PBS, pH 7.2) as suggested in the **APPLICATIONS** for 1 hr. at room temperature. (The concentration of antibody will depend on the conditions.)
- 13) Wash the membrane with PBS-T (5 min. x 3 times).
- 14) Incubate the membrane with 1:20,000 of anti-guniea pig IgG-HRP (Life Technologies; code no. 61-4620) diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hr. at room temperature.
- 15) Wash the membrane with PBS-T (5 min. x 3 times)
- 16) Wipe excess buffer on the membrane, then incubate it with ECL<sup>TM</sup> Western Blotting Detection Reagents (GE Healthcare; code no. RPN2106) for 1 min. Remove extra reagent from the membrane by dabbing with paper towel, and seal it in plastic wrap.
- 17) Expose to an X-ray film in a dark room for 10 min. Develop the film as usual. The condition for exposure and development may vary.

(Positive control for Immunopirecipitation; Mouse E14 ES cell)



### Immunoprecipitation of ZBTB24 from E14 ES cells

Lane 1: Input (total cell lysate) Lane 2: Anti-ZBTB24 pAb (PM085)

Lane 3: Normal guinea pig IgG (PM067)

Immunoblotted with Anti-ZBTB24 pAb (PM085)