

# CAT#

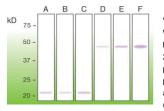
DB 123-0.05 (50 µl) DB 123-0.1 (100 µl)

# WESTERN BLOT (WB) PROTOCOL - INSTRUCTION MANUAL

## Western immunoblotting solutions:

- Wash buffer: 1x Tris Buffered Saline (TBS); 0.2% Tween 20
- Blocking buffer: 1xTBS; 0.2% Tween 20; 5% nonfat dry milk

For western blots, incubate the membrane with antibody diluted in blocking buffer for 2 hours at room temperature.



#### Anti - bax (DB 123)

Western blot analysis of bax protein in mouse brain extract (A), rat brain extract (B), HEK 293 cells (C) - 200 µg of total protein loaded per well. GST-fusion recombinant human bax protein was tested under the same conditions at the concentrations of 100 ng (D), 200 ng (E), and 500 ng (F).

# **IMMUNOPRECIPITATION (IP) PROTOCOL - INSTRUCTION MANUAL**

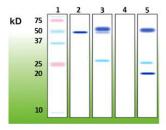
- Dilute sample (200 500 μg of total protein) with Correction Buffer (2.5% v/v Nonidet P-40, 5% w/v sodium deoxycholate, 0.5% w/v SDS in ddH<sub>2</sub>O) in ratio 4:1 (v/v).
- Add 5 µl of DB123 (anti-bax, clone G26-R) rabbit clonal monospecific antibody, mix gently and incubate for 1 hour on ice.
- Mix with 50 µl of ProteinG-Sepharose (washed with 10mM Tris-HCl, pH7.5\*) and incubate for 30 minutes at 4°C with gentle shaking.

\*NOTE: Washing of ProteinG-Sepharose with 10mM Tris-HCl, pH7.5: Resuspend 50 µl of ProteinG-Sepharose in 1 ml of 10mM Tris-HCl, pH7.5 by precise inverting of the tube several times. Centrifuge for 1 min, 900xg at 4°C and discard supernatant. Avoid of wasting ProteinG-Sepharose agarose gel beads during discarding. Repeat this procedure for 3 times.

4. Centrifuge ProteinG-Sepharose immunocomplex for 2 min, 900xg at 4°C and discard supernatant. Wash the pellet 3 times with 1 ml of RIPA Buffer (10mM TRIS-HCI, pH7.5, 140mM NaCl, 1% v/v Nonidet P-40, 1% w/v sodium deoxycholate, 0.5% w/v SDS v ddH<sub>2</sub>O).

IMPORTANT: Avoid of wasting/discarding ProteinG-Sepharose immunocomplex.

- Wash sediment with 1 ml of 10mM TRIS-HCl, pH7.5, centrifuge sample (agarose gel beads) for 1 min, 900xg at 4°C and discard the supernatant.
- Dissociate immunocomplex from ProteinG-Sepharose with the help of Reduction Buffer (125mM TRIS-HCI, pH6.8, 3.3% SDS, 5% β-mercaptoethanol). Mix the sample with 30 µl of Reduction Buffer, shake gently and incubate for 5 minutes at 65°C.
- Centrifuge at 3000xg for 5 minutes and transfer the supernatant (immunoprecipitated proteins) to new tube.
- 8. Separate the immunoprecipitated protein by 1D SDS-PAGE.



Representative picture of Bax immunoprecipitated from HEK 293 cells, visualized with clonal rabbit anti-Bax monospecific antibody(DB123) in Western blot. Primary antibody dilution - 1:2,000.

lane 1 – molecular weight marker, lane 2 – positive control with recombinant GST tagged BAX (200 ng), lane 3 – positive control of Immunoprecipitation with recombinant GST tagged BAX (200 ng), lane 4 – negative control, immunoprecipitation without primary antibody, lane 5 – immunoprecipitated BAX (-20 kDa) from HEK 293 cells (500 µg of crude protein extract)

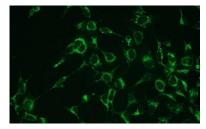
## PRODUCT INFORMATION

Clone number: Uniprot:	G26-R Human: Q07812; Mouse: Q07813; Rat: Q63690
Product description Basic information:	: Rabbit anti-bax clonal IgGs Major clone of rabbit immunoglobulin corresponding to immunogenic peptide
Immunogen:	Peptide derived from the N-terminal sequence of human bax. Antibody recognizes the epitope located between Pro13 - Gly36.
Species Reactivity:	Human, mouse, rat - tested
Buffer:	20 mM Tris-HCl, pH 8.0
Stabilizer:	10 mg/ml BSA
Preservative:	0.05% Sodium Azide
Storage:	10 µl aliquots at -20°C
Handling:	Avoid repeated freezing and thawing
Expiration:	24 months from the shipping date
Applications:	Western blot, Immunoprecipitation (IP), ELISA, Immunocytochemistry
Dilution range:	Western blotting – 1:2,000
	ELISA - 1:30,000 - 1:50,000
	Immunoprecipitation, ICC – 1:200 – 1:600

### **IMMUNOCYTOCHEMISTRY (ICC) PROTOCOL - INSTRUCTION MANUAL**

- Coat coverslips with 1% gelatin-coating solution for 2 hours at room temperature (RT); rinse with distilled water, and let to dry overnight. Before plating the cells, wash the coated coverslips briefly with PBS.
- 2. Fix the cells with 4% paraformaldehyde solution (in PBS, pH 7.2), for 15 min at RT.
- 3. Wash 2 x 3 min with PBS.
- 4. Permeabilize the cells with 0.1% Triton X-100 solution (in PBS, pH 7.2) for 5 min on ice.
- 5. Wash 2 x 3 min with PBS.
- 6. Incubate the cells in blocking buffer (0.3M glycine in PBS, 2% BSA) for 30 min at RT.
- Incubate the cells with primary antibody: anti-Bax clonal antibody at the dilution of 1:100

   1:300 in antibody dilution buffer (PBS, 1% BSA) for 1 hour at RT in humid chamber.
- 8. Wash 2 x 3 min with PBS.
- Apply the secondary antibody (*in this case, the goat anti-rabbit IgG-FITC from Jackson Immunoresearch, cat. # 111-095-003, was used* at 1:300 in antibody dilution buffer, and cells were incubated for 1 hour at RT in dark).
- 10. Wash 3 x 3 min with PBS.
- 11. Rinse once with distilled water.
- 12. Mount the slide for observation, with a drop of anti-fade mounting medium.



Representative picture of Bax expression in HEK293 cells, visualized with clonal rabbit anti-Bax monospecific antibody. Primary antibody dilution - 1:100.

### PRECAUTIONS

- 1. Intended for professional In Vitro Diagnostic use in laboratories.
- 2. Do not use after expiration date stamped on vial label.
- 3. Avoid contamination of the reagent.
- Any discrepancies in the recommended procedures stated in the working protocol may affect the final results.
- The reagent contains sodium azide (NaN<sub>3</sub>) which is highly toxic in higher concentrations. The concentration in the reagent (0.05%) is not considered as hazardous.
- 6. Disposal of waste material must be conducted in accordance with local regulations.
- 7. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.