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CODE No.

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



# Anti-HA-tag mAb-Alexa Fluor<sup>™</sup> 647

CLONALITY	Monoclonal
CLONE	TANA2
ISOTYPE	Mouse IgG2b κ
QUANTITY	100 µL, 1 mg/mL
SOURCE	Purified IgG from hybridoma supernatant
IMMUNOGEN	KLH conjugated synthetic peptide, YPYDVPDYA (HA-tag)
REACTIVITY	This antibody reacts with N-terminal and C-terminal HA-tagged proteins.
FORMULATION	PBS containing 1% BSA and 0.1% ProClin 150
STORAGE	This antibody solution is stable for one year from the date of purchase when stored at $4^{\circ}$ C.

### **APPLICATIONS-CONFIRMED**

Immunocytochemistry	2-5 μg/mL
Flow cytometry	2-5 μg/mL

For more information, please visit our website at https://ruo.mbl.co.jp/.

M180-A64

#### LABEL LICENSES:

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A JSR Life Sciences Company URL <u>https://ruo.mbl.co.jp</u> e-mail <u>support@mbl.co.jp</u>

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

#### **Immunocytochemistry**

- 1) Spread the cells in the nutrient condition on a glass slide, then incubate in a CO<sub>2</sub> incubator for one night.
- 2) Remove the culture supernatant by careful aspiration.
- 3) Fix the cells by immersing the slide in 4% paraformaldehyde (PFA)/PBS for 10 min. at room temperature (20~25°C).
- 4) Prepare a wash container such as a 500 mL beaker with a magnetic stirrer. Then wash the fixed cells on the glass slide by soaking the slide with a plenty of PBS in the wash container for 5 min. Take care not to touch the cells. Repeat another wash once more.
- 5) Immerse the slide in 0.2% Triton X-100/PBS for 10 min. at room temperature.
- 6) Wash the slide 2 times with PBS.
- 7) Cover each cell with normal goat serum for 5 min. at room temperature.
- 8) Add 200 μL of the primary antibody diluted with 2% fetal calf serum (FCS)/PBS as suggested in the **APPLICATIONS** onto the cells and incubate for 1 hr. at room temperature. (Optimization of antibody concentration or incubation condition is recommended if necessary.)
- 9) Wash the slide 2 times with PBS.
- 10) Counter stain with DAPI for 5 min. at room temperature.
- 11) Wash the slide 2 times with PBS.
- 12) Wipe excess liquid from slide but take care not to touch the cells. Never leave the cells to dry.
- 13) Promptly add mounting medium onto the slide, then put a cover slip on it.



Immunocytochemical detection of HA-tagged protein in HeLa Magenta: M180-A64 Blue: DAPI

Left: 2 μg/mL Right: 5 μg/mL

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## Flow cytometric analysis for adherent cells

- 1) Detach the cells from culture dish.
- 2) Wash the cells 3 times with 1 mL of washing buffer [PBS containing 2% fetal calf serum (FCS)].
- 3) Add 200 µL of 4% paraformaldehyde (PFA) to the cell pellet after tapping. Mix well, then fix the cells for 10 min. at room temperature.
- 4) Wash the cells 2 times with 1 mL of washing buffer.
- Add 200 μL of PBS containing 0.2% Triton X-100 to the cell pellet after tapping. Mix well, then permeabilize the cells for 10 min. at room temperature.
- 6) Wash the cells 1 time with 1 mL of washing buffer.
- 7) Resuspend the cells with washing buffer (4 x  $10^6$  cells/mL).
- 8) Add 100  $\mu$ L of the cell suspension into each tube, and centrifuge at 500 x g for 1 min. at room temperature (20~25°C). Remove supernatant by careful aspiration.
- Add 20 μL of Clear Back (human Fc receptor blocking reagent, MBL; code no. MTG-001) to the cell pellet after tapping. Mix well and incubate for 5 min. at room temperature.
- 10) Add 40 µL of the primary antibody at the concentration as suggested in the APPLICATIONS diluted in the washing buffer Mix well and incubate for 20 min. at room temperature.
- 11) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 min. at room temperature. Remove supernatant by careful aspiration. Repeat another wash once more.
- 12) Resuspend the cells with 500  $\mu$ L of the washing buffer and analyze by a flow cytometer.



## Flow cytometric detection of HA-tagged protein in HeLa

Closed: M180-A64 (2 µg/mL) Open: Isotype control (M077-A64)

Upper: HA-tagged protein in HeLa Lower: Parental cell (HeLa)