M130-3M Lot 011A~ Page 1	For Research Use Only.
	Not for use in diagnostic procedures.



MONOCLONAL ANTIBODY

Anti-Midoriishi-Cyan mAb

Code No.	Clone	Subclass	Quantity	Concentration
M130-3M	5B7	Mouse IgG1	100 µL	1 mg/mL

BACKGROUND: The fluorescent protein, *CoralHue*TM Midoriishi-Cyan 1 (MiCy1), from the stony coral whose Japanese name is "Midori-ishi". It absorbs light maximally at 472 nm and emits cyan light at 495 nm. Wild-type MiCy1 rapidly matures to form a fluorescent dimeric complex. MiCy1 can be used to mark individual cells or to report gene expression without problems stemming from protein aggregation.

- **SOURCE:** This antibody was purified from hybridoma (clone 5B7) supernatant using protein A column. This hybridoma was established by fusion of mouse myeloma cell P3U1 with C3H mouse lymphocyte immunized with the recombinant *CoralHue*TM Midoriishi-Cyan 1.
- **FORMULATION:** 100 µg IgG in 100 µL volume of 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.
- **REACTIVITY:** This antibody reacts with $CoralHue^{TM}$ Midoriishi-Cyan 1 and $CoralHue^{TM}$ monomeric Midoriishi-Cyan 1 on Western blotting.

APPLICATIONS:

Western blotting; 1 µg/mL

Immunoprecipitation; Not recommended

*Clone 2C1 is suitable for this application. Please refer to the data sheet (MBL, code no. M116-3M).

Immunohistochemistry; Not tested

Immunocytochemistry; Not tested

Flow cytometry; Not tested

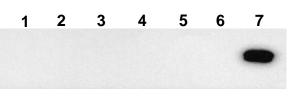
Detailed procedure is provided in the following **PROTOCOL.**

INTENDED USE:

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REFERENCE:

1) Karasawa, S., et al., Biochem J. 381, 307-312 (2004)



Western blotting analysis of Azami-Green (1), Dronpa-Green (2), Kaede (3), Keima-Red (4), Kikume Green-Red (5), Kusabira-Orange (6) and Midoriishi-Cyan (7) from E. coli using M130-3M.

PROTOCOL:

SDS-PAGE & Western blotting

- 1) Mix the sample with equal volume of Laemmli's sample buffer.
- 2) Boil the samples for 3 minutes and centrifuge. Load 10 μ L of sample per lane on a 1-mm-thick SDS-polyacrylamide gel and carry out electrophoresis.
- Blot the protein to a polvinylidene 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% methanol). See the manufacturer's manual for precise transfer procedure.
- 4) To reduce nonspecific binding, soak the membrane in 10% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature, or overnight at 4°C.
- 5) Incubate the membrane with primary antibody diluted with PBS, pH 7.2 containing 1% skimmed milk as suggested in the **APPLICATIONS** for 1 hour at room temperature. (The concentration of antibody will depend on the conditions.)
- 6) Wash the membrane with PBS (5 minutes x 6 times).
- 7) Incubate the membrane with 1:10,000 Anti-IgG (Mouse) pAb-HRP (MBL; code no. 330) diluted with 1% skimmed milk (in PBS, pH 7.2) for 1 hour at room temperature.
- 8) Wash the membrane with PBS (5 minutes x 6 times).
- 9) Wipe excess buffer off 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.
- 10) Expose to an X-ray film in a dark room for 20 seconds. Develop the film as usual. The condition for exposure and development may vary.

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*CoralHue*TM Kaede is a product of co-development with Dr. Atsushi Miyawaki at the Laboratory for Cell Function and Dynamics, the Brain Science Institute, and the Institute of Physical and Chemical Research (RIKEN).

Use of *CoralHue*TM Kaede requires a license from MBL Co., Ltd. MBL grants non-profit research organizations the right to use the product for non-commercial research purposes. For commercial entities a commercial license is required. For more information, please contact <u>support@mbl.co.jp</u>. Patent Nos. JP5117464 and US7345157.

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