Anti-*Campylobacter* outer-membrane protein antibody, mouse monoclonal (cj-01)

Product code	64-102
Size	100 µg
Storage	-20℃
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgM fraction by chromatography from hybridoma cell culture medium.
Immunogen	Crude extract of *Campylobacter jejuni*
Isotype	Mouse IgM
Reactivity	*C. jejuni* and *C. coli* major outer-membrane protein (porin) of ~43 kDa
Special notes	The HRP-conjugated goat anti-mouse IgM and IgG were used as the second antibody.
Application	1. Western blotting (1/500~1/1,000 dilution) 2. ELISA (assay dependent) 3. Immunoblot (assay dependent) 4. Immunochromatography (assay dependent) Other applications have not been tested.
Background	Campylobacteriosis is an infection by the *Campylobacter* bacteria,most commonly *C. jejuni*. It is among the most common bacterial infections of human, often a foodborne illness. Many gram-negative bacteria have one or more Major Outer Membrane Proteins (MOMPs) usually function as general or specific porins that regulate the permeability of the membrane to small molecules. MOMP is an immunodominant protein and makes an attractive target antigen. *C. jejuni* has a porin as MOMP of 43 kDa, which is processed from the 45.7 kDa precursor with signal peptide of 22 amino acids.
Data Link	UniProtKB: P80672 (PORA_CAMJE)

Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.

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Data Images: 64-102 Anti-Campylobacter outer-membrane protein antibody, mouse monoclonal (cj-01)

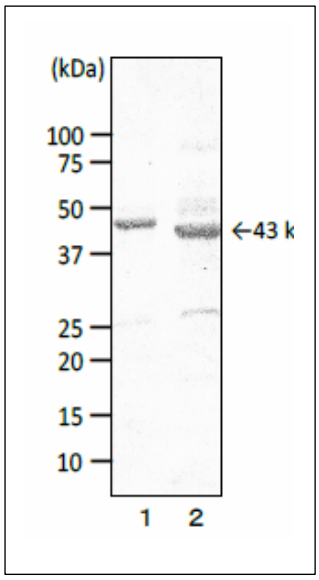

Fig.1. Western blotting of porin in extract of Campylobacter with MAb (cj-01).

1. Crude extract of Campylobacter coli

2. Crude extract of Campylobacter jejuni

MAb (cj-01) recognizes porins in extracts of C. coli and C. jejuni as apparent molecular mass of 44 kDa and 43 kDa protein, respectively.

The HRP-conjugated goat anti-mouse IgM and IgG were used as the second antibody.

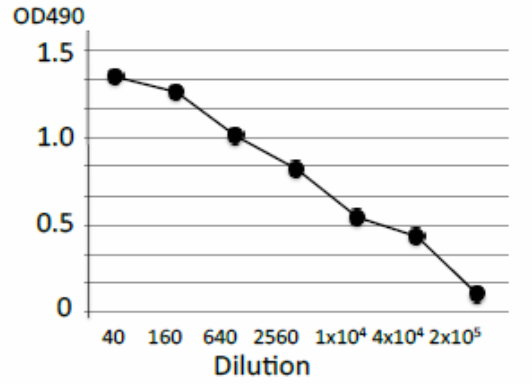

Fig.2 Titration of antibody reactivity of MAb (cj-01) by indirect ELISA, using crude extract of Campylobacter jejuni.

The wells of plate were coated with crude extract of *C. jejuni* (100 µl, 1 µg/ml). After blocking with 5% skim milk, 100 µl of antibody at the indicated dilution was added to the each well. HRP-conjugate goat anti-mouse IgG (100 µl, x2000 dilution) was added. Color was developed with OPD

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(orthophenylenediamine) as substrate. Optical densities (OD) was measured at 490nm.

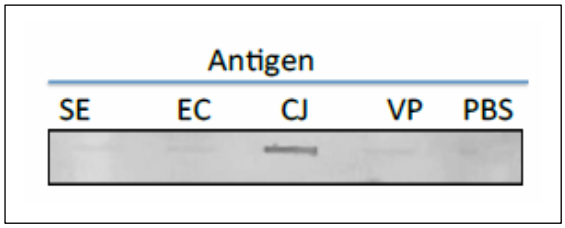

Fig.3. Test of reactivity of MAb (cj-01) with several food poisoning bacteria in slot blot test. Extract of each strain of food poisoning bacteria was coated onto 5 areas of a nitrocellulose membrane. The membrane was soaked in and reacted with MAb (cj-01).
SE: *Salmonella Enteritidis*, EC: *Escherichia coli*, CJ: *C. jejun*i, VP: *Vibrio parahaemolyticus*, Mab (cj-01) specifically reacts with extract of *C. jejun*i.

	ELISA	WB
Campylobacter jejuni (JCM2529)	＋	43K
Other 3 isolated strains	＋	
Campylobacter coli (JCM2013)	＋	44K
Salmonella Enteritidis	—	—
Vibrio parahaemolyticus	—	
Escherichia coli (ETEC)	—	—
EHEC (O157:H7)	—	
Staphylococcus aureus	—	—
Clostridium perfringens	—	
Bacillus cereus	—	

Table1. Specific reactivity of MAb (cj-01) with various food poisoning bacteria by ELISA and WB.

Reference: There has been no publication using this antibody yet.

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