Anti-*C. perfringens* collagenase antibody, mouse monoclonal (cp-02)

Product code	64-050
Size	100 µg
Storage	-20℃
Concentration	1.0 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgM fraction with protein A from hybridoma cell culture medium.
Immunogen	Culture supernatant of *Clostridium perfringens*
Isotype	Mouse IgM
Reactivity	Collagenases of *Clostridium perfringens* and *C. histolyticcum*
Special notes	N/A
Application	1. Western blotting （1/500~1/1,000 ） 2. ELISA （assay dependent） This antibody is useful for detecting food-poisoning *Clostridium* strains.
Background	*Clostridium perfringens* is one of the major causative agents of food poisoning. *C. perfringens* produces various gelatinolytic enzymes with molecular masses ranging from approximately 120 to approximately 60 kDa. A gelatinolytic enzyme is present in the largest quantity in the culture supernatant, and this enzyme is purified as collagenase. The collagenase of *Clostridium histolyticum* (68 kDa).is the best studied and characterized.
Data Link	UniProtKB: P43153 (COLA_CLOPE), Q46085 (COLH_HATHI)

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: 64-050 Anti-*C. perfringens* collagenase antibody, mouse monoclonal (cp-02)

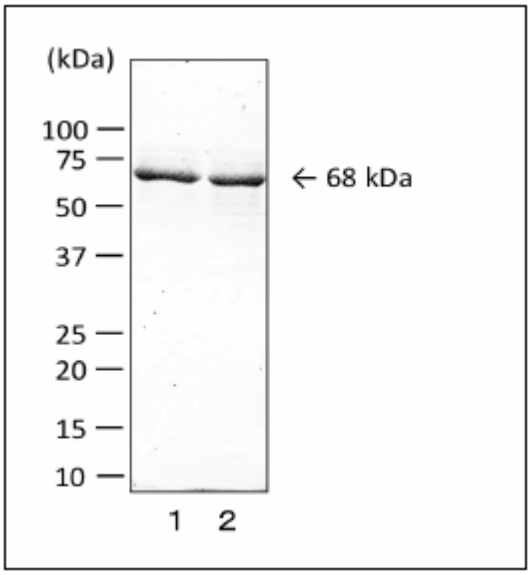

Fig.1. Detection of collagenase of *C. perfringens* by Western blotting with monoclonal antibody.

1. Purified collagenase of *C. histolyticum*
2. Culture supernatant of *C. perfringens*.

The 68 kDa band in lane 2 is collagenase of *C. perfringens*.

The primary antibody was used at 1/1,000 dilution.

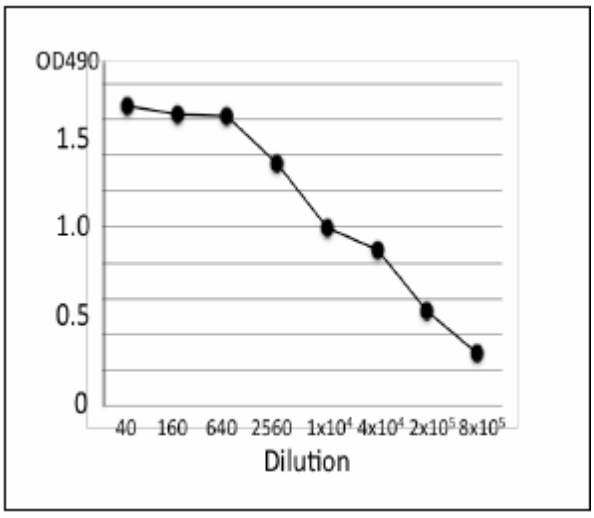

Fig.2. Titration of antibody reactivity of MAb (cp-02) by indirect ELISA using culture medium of *C. perfringens*.

The wells of plate were coated with culture medium of *C. perfingens* (100 µl, 1 µg/ml). After blocking with 5% skim milk, 100 µl of antibody at the indicated dilutions was added to the each well. HRP-conjugated goat anti-mouse IgG, IgM and IgA (100 µl, x2000 dilution) was added. Color was developed with orthophenylenediamine as substrate. Optical densities (OD) measured at 490nm.

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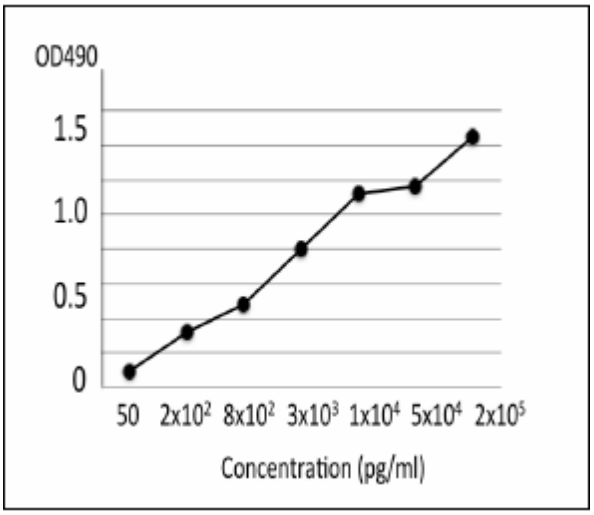

Fig.3. Titration of collagenase in culture medium of *C. perfringens* by indirect ELISA using MAb.
ELISA plate is coated with indicated amounts of the culture medium of *C. perfringens* per well. MAb (cp-02) was used at 1/500 dilution. ELISA was performed as in Fig.2.

	ELISA	WB
Clostridium perfringens (ATCC13124)	+	68K
Bacillus cereus	−	
Staphylococcus aureus	−	
Campylobacter jejuni	−	
Salmonella Enteritidis	−	
Vibrio parahaemolyticus	−	
Escherichia coli (ETEC)	−	
E. coli 0157:H7 (EHEC)	−	
Purified Collagenase (from C.histolyticum)	+	68K

Tale 1. Immunological reactivity of MAb (cp-02) with various food poisoning bacteria

Reference: There has been no publication using this antibody.

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