

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

Product code	64-050
Size	100 µg
Storage	-20°C
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 <i>Clostridium perfringens</i>
Isotype	Mouse IgM
Reactivity	Collagenases of <i>Clostridium perfringens</i> and <i>C. histolyticum</i>
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 <i>Clostridium</i> strains.
Background	<i>Clostridium perfringens</i> is one of the major causative agents of food poisoning. <i>C. perfringens</i> 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 <i>Clostridium histolyticum</i> (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.	

Data Images: 64-050 Anti- *Clostridium perfringens* collagenase antibody, mouse monoclonal (cp-02)

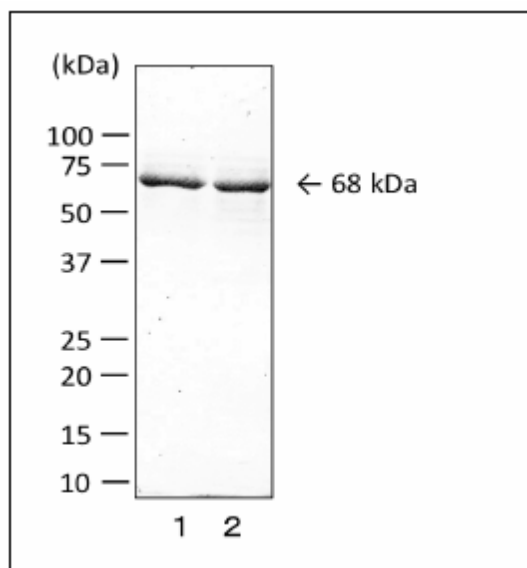


Fig.1. Detection of collagenase of *C. perfringens* by Western blotting with monoclonal antibody.

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.

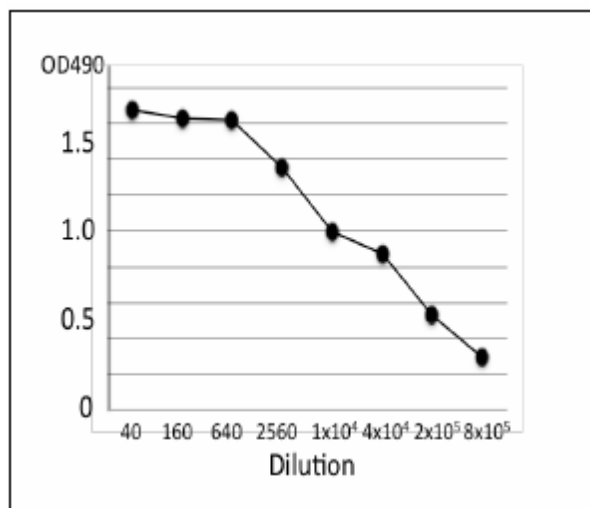


Fig.2. Titration of antibody reactivity of MAb (cp-02) by indirect ELISA using culture medium of *C. perfringens*.

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

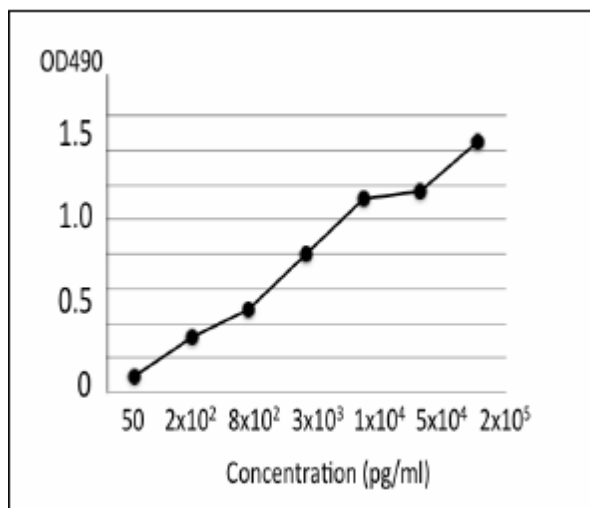


Fig.3. Titration of collagenase in culture medium of *C. perfringens* by indirect ELISA using MAb. ELISA plate is coated with indicated amounts of the culture medium of *C. perfringens* per well. MAb (cp-02) was used at 1/500 dilution. ELISA was performed as in Fig.2.

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

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

Reference: There has been no publication using this antibody.