Anti- TDH / TRH Toxin (*Vibrio parahaemolyticus*) antibody, mouse monoclonal (vp-01)

Product code	64-013
Size	100 µg
Storage	-20℃
Concentration	0.5 mg/ml
Buffer	PBS- with 50% glycerol
Purity	Purified IgG fraction with protein A from hybridoma cell culture medium
Immunogen	Culture supernatant of *V. parahemolyticus*
Isotype	Mouse IgG1
Reactivity	*V. parahemolyticus* TDH and TRH toxins
Special notes	N/A
Application	1. Western blotting (1/500~1/1,000) 2. ELISA (assay dependent) Other applications have not been tested.
Background	Many *Vibrio parahaemolyticus* strains isolated as a cause of food poisoning, produce toxin called hemolysin, and this is the main cause of illness. Two kinds of hemolysins, **T**hermo-resistant **D**irect **H**emolysin (TDH) and **T**DH **R**elated **H**emolysin (TRH), are known. TDH is the heat labile toxin protein of molecular weight 21.3 kDa (189 aa). Homology of TRH (21.1 kDa, 189 aa) with TDH is about 60%, and shows partial antigenic similarities.
Data Link	UniProtKB P19249 (Thermostable direct hemolysin1) UniProtKB Q769J9 (TDH related hemolysin)

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

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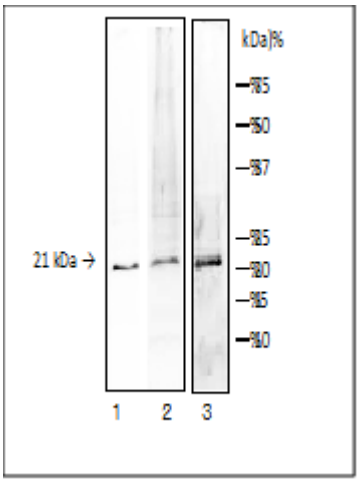
Data Images: 64-013 Anti- TDH / TRH Toxin (*Vibrio parahaemolyticus*) antibody, mouse monoclonal (vp-01)



F ig.1. Detection of *V. parahaemolyticus* TDH and TRH by Western blotting with MAb (vp-01)

1.Culture medium of *V. parahaemolyticus* (trh$^+$)

2.Culture medium of *V. parahaemolyticus* (tdh$^+$)

3.Culture medium of *V. parahaemolyticus* (trh$^+$)

MAb (vp-01) was used at 1/1,000 dilution) in lanes 1 and 2.

Polyclonal antiTRH antibody (BioAcademia 64-015) was used at 1/1,000 dilution in lane 3.

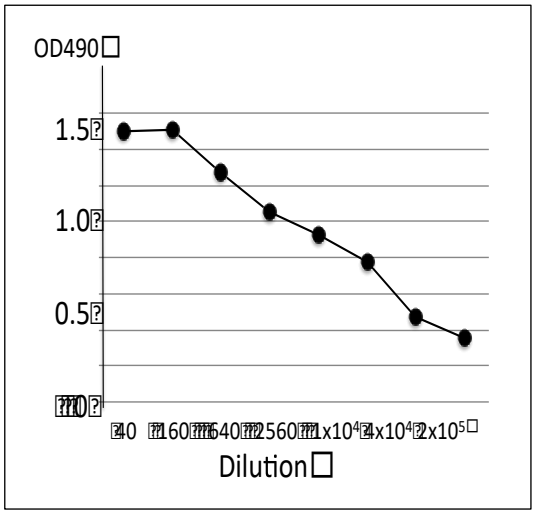


Fig.2. Titration of antibody reactivity of MAb (vp-1) by indirect ELISA, using culture medium of *V. parahaemolyticus* trh$^+$

The wells of plate were coated with culture medium of *V. parahaemophilus* trh$^+$(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 (100µl、x2000 dilution) was added. Color was developed with orthophenylenediamine as substrate. Optical densities (OD) measured at 490nm.

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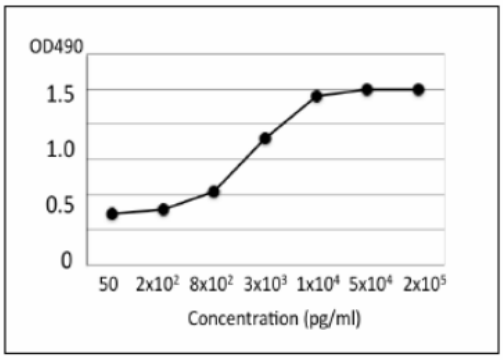

Fig.3. Indirect ELISA of TDH in extract of *V. papahaemolyticus* trh⁺ with MAb (vp-01)

ELISA plate was coated with indicated amounts of the extract of *V, papahaemolyticus* trh⁺. MAb (vp-01) was used at 1/500 dilution. ELISA was performed as in Fig.2.

	ELISA	WB
Vibrio parahaemolyticus (NBRC12711)	+	21K
Other 3 isolated strains	+	21K
Salmonella Enteritidis	−	−
E. coli 0157:H7	−	
Staphylococcus aureus	−	
Bacillus cereus	−	
Partially purified TDH	+	

TDH: Thermostable direct hemolysin

Table 1. Reactivity of MAb (vp-01) with various food poisoning bacteria.

Reference: There has been no publication using this antibody.

Please let us know when your research using this antibody is published. We will offer one vial of our antibody as compliment.

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