

Anti- Verotoxin (*E. coli*) / Shiga Toxin (*S. dysenteriae*) antibody, rabbit serum

Product code	64-025
Size	100 µl
Storage	Store 4°C for short term For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Concentration	N/A
Buffer	0.09% sodium azide
Purity	Rabbit antiserum
Immunogen	Initial immunization by VT1 toxoid and boosted by VT1 toxin.
Isotype	Rabbit IgG
Reactivity	VT1 and VT2 of <i>E. coli</i> VTEC strain and Shiga toxin of <i>Shigella dysenteriae</i> .
Special notes	N/A
Application	1. Western blotting (1/2,000dilution) 4. Immunoprecipitation 2. ELISA Other applications have not been tested.
Background	Vero toxins, VT1 and VT2 are produced by Vero toxin producing <i>E.coli</i> (VTEC) or Entrohaemorrhagic <i>E. coli</i> (EHEC) and have lethal activity to Vero cells. The primary structure of VT1 is identical or nearly identical to Shiga toxin (Stx) produced by <i>Shigella dysenteriae</i> serotype 1 and also called Slt 1 (Shiga-like toxin 1). VT is composed from one A subunit and five B subunits. Some <i>E. coli</i> strains produce both VT1 and VT2, and they share sequence identity of 55 %.
Data Link	GenBank M16625 Shiga-like toxin I subunit A and subunit B UniProtKB Q9FBI2 Shiga toxin subunit A UniProtKB Q7BQ98 Shiga toxin subunit B
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Images: 64-025 Anti- Verotoxin (*E. coli*) / Shiga Toxin (*S. dysenteriae*) antibody, rabbit serum

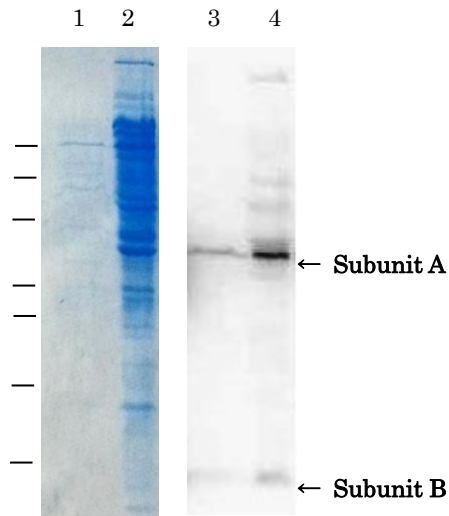


Fig.1.Detection of VT1 by western blotting

1. SDS-PAGE of culture medium (50 μ l) of VTEC (O91:H14)
2. SDS-PAGE of crude extracts of VTEC (O91:H14) (20 μ g)
3. Western blotting of culture medium of VTEC (O91:H14)
4. Western blotting of crude extracts of VTEC (O91:H14)

The anti-Verotoxin antibody was used at 1/2,000 dilution. As the secondary antibody, HRP conjugated goat anti-rabbit IgG was used at 1/20,00 dilution

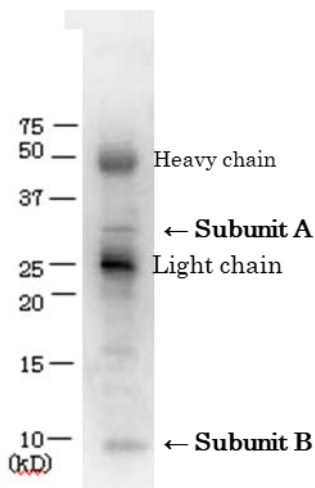


Fig.2. Immunoprecipitation of VT1 from culture medium of VTEC (O91:H14) with anti-Verotoxin antibody.

The antibody for immunoprecipitation was used at 1/200 dilution.

Arrows shows subunit A and subunit B of VT1. Heavy chain and Light chain indicate those of IgG.

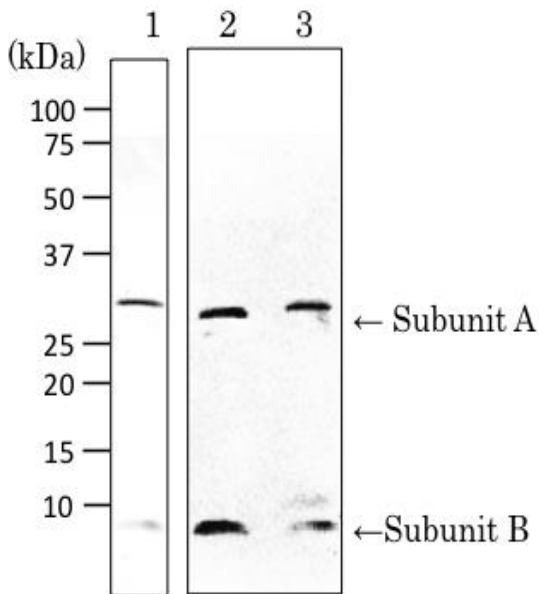


Fig.3. Detection of VT1 and VT2 by Western blotting with anti-Vero toxin .

1. Culture medium of *E. coli* O157:H7 (100 µl)
2. Purified VT1 (50 ng)
3. Purified VT2 (50 ng)

The anti-Verotoxin antibody was used at 1/2,000 dilution and as the secondary antibody, HRP conjugated goat anti-rabbit IgG was used at 1/20,000 dilution

Arrow shows subunit A and subunit B.

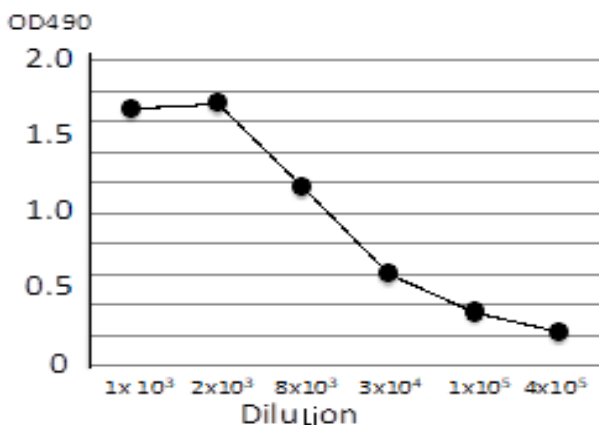


Fig.4. Titration of antibody reactivity of anti-Vero Toxin by indirect ELISA using crude extract of *E.coli* O157:H7

The wells of plate were coated with crude extract of O157:H7 (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.