

Datasheet for ABIN2452158  
**anti-TRH Toxin antibody**



[Go to Product page](#)

3 Images

2 Publications

## Overview

Quantity:	100 µg
Target:	TRH Toxin
Reactivity:	Vibrio parahaemolyticus
Host:	Rabbit
Clonality:	Polyclonal
Application:	Dot Blot (DB), Immunoprecipitation (IP), Western Blotting (WB)

## Product Details

Immunogen:	TRH toxoid and toxin purified from culture medium of V. parahemolyticus TRH+ strain.
Purification:	IgG fraction purified from the rabbit anti-TRH serum by salting out, ion-exchange chromatography
Sterility:	Sterile filtered

## Target Details

Target:	TRH Toxin
Background:	Many Vibrio parahemolyticus isolated as a cause of food poisoning, produce toxin called hemolysin, and this is the main cause of illness. The hemolysin of V. parahemolyticus mainly interacts with an intestinal tract or the heart, produces diarrhea by enterotoxicity, and also there are severe cases of making a patient die by cardiotoxicity. Two kinds, heat-resistant hemolysin (TDH, thermostable direct hemolysin) and heat-resistant toxin related hemolysin (TRH, TDH-related hemolysin), are known as hemolysins of V. parahemolyticus. Among these, TDH is known for many years and has been studied more extensively. In order to distinguish whether it

## Target Details

---

is the *V. parahemolyticus* that produces TDH, samples are grown on the Agatsuma medium (blood agar which is added with mannitol), and judged by whether a hemolysis is observed or not. This hemolysis was one of the examining methods, which is called Kanagawa phenomenon to judges whether it is pathogenic *V. parahemolytica*. However, it became clear that the food poisoning by the *V. parahemolyticus* of Kanagawa-phenomenon negativity was discovered, and this organism did not produce TDH, but it produced TRH. Moreover, since the Kanagawa phenomenon sensitivity is not so high, the immunological technique employing antibody against toxin is used together for the judgment of pathogenicity of *V. parahemolyticus*. TRH is the heat labile toxin protein of molecular weight 21.1 kDa (189 aa). Homology of TDH (21.3 kDa, 189 aa) with TRH is about 60 % (reference 1 and 2), and shows partial antigenic similarities. Susceptibility of the blood cells of various animals to TRH differs greatly, and TRH shows more than 100 times in rabbit skin capillary permeability activity than TDH.

---

UniProt: [P19249](#)

## Application Details

---

Application Notes: 1) Western blotting: 2,000~10,000 time dilution  
2) Immunoprecipitation  
3) ELISA (assay dependent)

---

Restrictions: For Research Use only

## Handling

---

Format: Liquid

---

Concentration: 1 mg/mL

---

Buffer: PBS, 50 % glycerol. Azide-, carrier-free.

---

Preservative: Azide free

---

Storage: -20 °C

---

Storage Comment: Upon arrival centrifuge briefly and store at -20 C.

## Publications

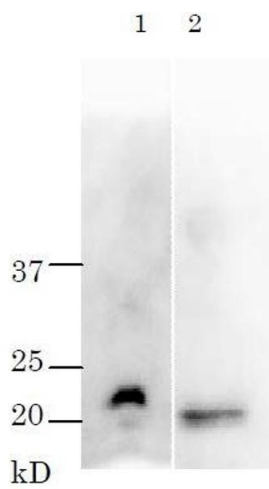
---

Product cited in: Nishibuchi, Taniguchi, Misawa, Khaeomaneelam, Honda, Miwatani: "Cloning and nucleotide sequence of the gene (trh) encoding the hemolysin related to the thermostable direct hemolysin

of *Vibrio parahaemolyticus*." in: **Infection and immunity**, Vol. 57, Issue 9, pp. 2691-7, (1989) ([PubMed](#)).

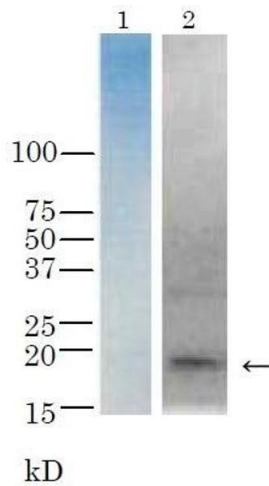
Honda, Ni, Miwatani: "Purification and characterization of a hemolysin produced by a clinical isolate of Kanagawa phenomenon-negative *Vibrio parahaemolyticus* and related to the thermostable direct hemolysin." in: **Infection and immunity**, Vol. 56, Issue 4, pp. 961-5, (1988) ([PubMed](#)).

Images



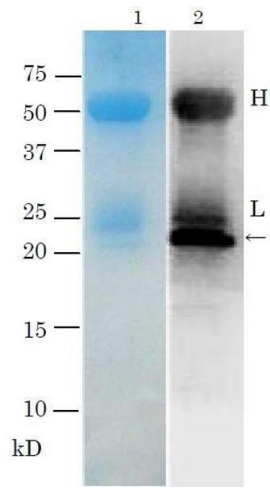
Western Blotting

Image 1.



Western Blotting

Image 2.



**Western Blotting**

**Image 3.**