

KPL BacTrace[®]

Goat anti-*E. coli* O45 Antibody

| <u>Catalog No.</u> | <u>Size</u> |
|-----------------------|-------------|
| 5310-0333 (01-95-96) | 1.0 mg |
| 5310-0357 (011-95-96) | 0.1 mg |

DESCRIPTION

Affinity purified antibody isolated from a pool of serum from goats immunized with *E. coli* O45.

FORM/STORAGE

Lyophilized. Store at 2-8 °C until rehydrated. Stable for a minimum of 1 year when stored at 2-8 °C.

STABILIZER AND PRESERVATIVE

No stabilizers or preservatives added. Non-sterile.

ANTIBODY CONCENTRATION

The quantity of affinity purified antibody is either 1.0 mg or 0.1 mg as determined by UV absorbance at 280 nm.

SPECIFICITY/CROSS REACTIVITY

This product is designed to react specifically with *E. coli* O45. Product is tested via ELISA techniques as applicable. Minimal cross-reactivity may exist to other similar species.

REHYDRATION AND STORAGE

Two methods for rehydration and storage are recommended to meet most needs. Procedure A, using 50% glycerol, is preferred. It eliminates freezing at -20 °C and is an effective biological inhibitor. At a working dilution, the level of glycerol is too small to affect most assays.

Procedure A: 50% Glycerol

Solution Preparation: Rehydrate with 1 mL of 50% glycerol.

Rehydration: Transfer 1 mL of the 50% glycerol solution to the product vial. Rotate the vial until the lyophilized pellet is totally dissolved. Antibody concentration will then be 1.0 mg/mL or 0.1 mg/mL.

Storage: The rehydrated product is stable for a minimum of 1 year at 2-8 °C.

Procedure B: Acetic Acid/Bi-Carbonate

Solution Preparation: Prepare immediately before use:

0.01M Acetic Acid Solution: Mix 25 µL of glacial acetic acid and 40 mL reagent quality water.

0.177M Carbonate-Bicarbonate Solution: Dissolve 1.09 g of Na₂CO₃ and 0.63 g of NaHCO₃ in 100 mL reagent quality water.

Rehydration: Add 0.1 mL of 0.01M acetic acid solution to the antibody. Rotate vial until totally dissolved. Add 0.1 mL of the carbonate-bicarbonate solution and rapidly mix to obtain a clear or opalescent solution. Heat at 37 °C for 30 minutes and allow to slowly cool to room temperature. Final concentration is 5.0 mg/mL or 0.5 mg/mL.

Storage: This product may be stored for up to one week at 2-8 °C; thereafter, it should be stored at -20 °C. At -20 °C, product is stable for a minimum of 1 year.

SUGGESTED WORKING CONCENTRATIONS

Optimal working concentrations should be determined experimentally. Prepare working concentration in PBS or other buffer immediately before use. Dilution is not recommended for long-term storage. Suggested concentrations are listed below. In many cases, the antibody may be used at lower concentrations than indicated:

| | |
|-------------------|-----------|
| Capture Antibody: | 10 µg/mL |
| Primary Antibody: | 1-2 µg/mL |

REFERENCES

Grimont, PAD, and Weill, FX. Antigenic formulae of the *Salmonella* serovars, 9th ed. Paris: World Health Organization Collaborating Center for Reference and Research on *Salmonella*, Institut Pasteur; 2007.

PRODUCT SAFETY AND HANDLING

This product is considered non-hazardous as defined by The Hazard Communication Standard (29 CFR 1910.1200). Avoid contact with skin and eyes. In case of contact or spillage, clean with copious amounts of water. Dispose of via institutional guidelines.

RELATED PRODUCTS

| | CAT. NO. |
|-----------------------------------|----------------------|
| KPL BSA Diluent/Blocking Solution | 5140-0006 (50-61-00) |
| KPL 10X Coating Solution | 5150-0014 (50-84-00) |

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| KPL Wash Solution | 5150-0008 (50-63-00) |
| KPL 10X PBST | 5460-0026 (51-14-01) |
| KPL 10X TBST | 5460-0040 (51-18-01) |
| KPL <i>E. coli</i> O45:H2 Pos. Control | 5370-0019 (50-95-96) |

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis.