

# Colitech

## Product Description



## Enzyme Substrate Detection Reagent

*Character This product is white or light yellow granules*

*Clarification degree Colorless or slightly yellow*

*pH 7.0~7.6*

*weight 2.7±0.5g*

*Storage Long term storage, refrigerating, drying, sealing and avoiding light storage at 4 ~ 8 °C。*

*Term of validity 1 years*

## Enzyme Substrate Detection Reagent Working principle

*In the water samples containing total coliform bacteria, the target bacteria were cultured in the Minimal Medium ONPG-MUG medium at 36±1 C. The specific enzyme beta galactosidase produced by the total coliform bacteria can decompose the color source substrate of the Minimal Medium ONPG-MUG medium, which makes the culture medium yellow; meanwhile, the large intestine in the water sample is in large intestine. Escherichia coli produces a specific beta glucuronase to decompose the fluorescent substrate MUG in Minimal Medium ONPG-MUG medium and produce characteristic fluorescence. The same principle, the heat coliform group (fecal coliform group) will decompose the color source substrate ONPG in the Minimal Medium ONPG-MUG medium at 44.5±0.5 C, making the medium yellow.*

*Packaging specification 200/box*

## Usage method

**Qualitative detection**

*Step 1 Add reagent in 100ml water sample, dissolve it. and Culture 24h at  $36\pm 1^{\circ}\text{C}$*

*Step 2 Read result*

*Colorless = negative*

*Yellow = total coliform positive*

*Yellow = total coliform positive*

*Yellow + fluorescence = Escherichia coli positive*

**Quantitative detection**

*Note: the heat tolerant coliform group (fecal coliform) needs to be cultured at  $44.5\pm 0.5^{\circ}\text{C}$  24h, and yellow is positive.*

**Quantitative detection**

*Step 1 Add reagent in 100ml water sample, dissolve it.*

*Step 2 Pour into the 51 or 97 detection plate.*

*Step 3 Use LK sealer to seal the detection plate, and cultivate 24h at  $36^{\circ}\text{C}$*

*Step 4 Results qualitative test was used to check the MPN table count.*

*Note: the heat tolerance coliform group (fecal coliform group) needs to be cultured at  $44.5\pm 0.5^{\circ}\text{C}$  24h, and the Yellow pore pattern is positive, and the corresponding MPN table count is found*