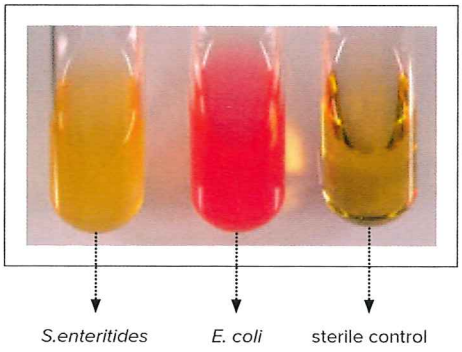
RUG™ simplifies the process of *E. coli* detection

THE PRODUCT:

Resorufin-beta-D-glucuronic acid methyl ester (RUG™)
Biosynth Patent applied: EP11169147
Biosynth Cat. No. R-2155_P00

COLORATION AFTER 22 H:



RUG™ generates a strong pink coloration - No UV light needed

In contrast to MUG, RUG™ does not require fluorescence detection, as the released dye Resofurin is of intense pink color. Fluorescence detection is optional. Fluorescence of Resofurin is excited at 565 nm in the range of red light and does not require UV illumination.

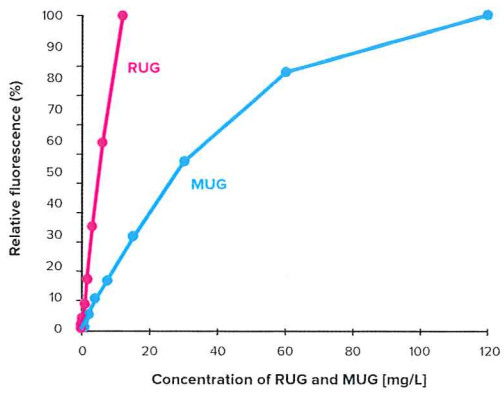
Assay:

Escherichia coli ATTC 25922 and *Salmonella enteritides* RKI 05/07992 were inoculated at low density (20 CFU / mL) in AT *E. coli* detection broth containing 12 mg/L R-2155_P00 (RUG™).

Tubes were incubated at 37°C and 150 rpm.

RUG™ is 10 times more sensitive as compared to MUG

FLUORESCENCE AFTER 24H. *E. COLI* GROWN IN LAURYN SULFATE BROTH



RUG™ is a highly efficient beta-glucoronidase substrate for the detection of *E. coli*:

A concentration of only 12 mg/L of RUG™ in the growth media generates a 100% of the fluorescence signal.

Resofurin red fluorescence in a test tube

Assay:

E. coli was incubated for 24 h in lauryl sulfate broth containing concentrations of 0.9 mg/L to 120 mg/L of either RUG™ or MUG.

Red fluorescence (left, RUG™) or blue fluorescence (right, MUG) was recorded.

Robust fluorescent signal: Resorufin is stable in a wide pH range

Using RUG™ instead of MUG gives the researcher more flexibility in terms of the media composition and pH range of the media.