

## Product Information



### Lyophilized Culture Discs (71– and 72– part numbers)

#### Intended Use:

For use in the *in vitro* Bacterial Reverse Mutation Test; i.e., Ames Assay. See below table to determine the reversion event that each strain detects and for plasmid information.

#### Warnings and Precautions:

For Laboratory Use.

The bacterial strains contained in the lyophilized discs are potential etiologic agents and are intended for use only by those skilled in the safe handling of potentially infectious agents. The strains are considered BioSafety Level 2 organisms and should be handled accordingly [see CDC/NIH Biosafety in Microbiological and Biomedical Laboratories, HHS Publication (CDC) 93-8395. Available from US Government Printing Office, Superintendent of Documents, Washington DC 20402 (Stock No. 017-040-00523-7)].

Observe aseptic techniques and established precautions against microbiological hazards throughout all procedures.

After use, dispose of all materials according to your institutional biohazard program.

#### Storage:

Upon receipt, store discs tightly closed under refrigeration at 2 – 8°C.

#### Procedure:

Warm the product vial to room temperature and remove the cap and stopper so as to avoid contaminating the assembly. Using a flamed or disposable bacteriological loop, needle, or tweezers, aseptically remove a disc and use to inoculate a quantity of Oxoid #2 nutrient broth. Use a vessel that is 3 – 5 times the volume of the culture to ensure adequate aeration. Leave the cap loose for adequate oxygen exchange. Orient the vessel such that maximum surface area is achieved with the broth. Hold the culture stationary at 37°C overnight. Early the next morning incubate with shaking at 37°C until a density of  $1-2 \times 10^9$  bacteria per mL is achieved, at which point the culture will be virtually opaque - the density can be estimated by direct counting, measurement of optical density or plating dilutions on nutrient agar. Under optimal conditions this bacteria may double in number approximately every 30 minutes or less. Do not overgrow the culture(s) as this may lead to erroneous results.

*S. typhimurium* and *E. coli* WP2 strains

Part	Strain Designation	Reversion Event	Plasmid	Antibiotic resistance
71-1535L	<i>S. typhimurium</i> TA1535	Base-pair substitution	N/A	N/A
71-1537L	<i>S. typhimurium</i> TA1537	Frameshift	N/A	N/A
71-1538L	<i>S. typhimurium</i> TA1538	Frameshift	N/A	N/A
71-100L	<i>S. typhimurium</i> TA100	Base-pair substitution	pKM101	Ampicillin
71-097L	<i>S. typhimurium</i> TA97a	Frameshift	pKM101	Ampicillin
71-098L	<i>S. typhimurium</i> TA98	Frameshift	pKM101	Ampicillin
71-102L	<i>S. typhimurium</i> TA102	Base-pair substitution Crosslinks	pKM101, pAQ1	Ampicillin, Tetracycline
72-187	<i>E. coli</i> WP2 <i>trp</i>	Base-pair substitution Crosslinks	N/A	N/A
72-188	<i>E. coli</i> WP2 <i>trp uvrA</i>	Base-pair substitution	N/A	N/A
72-002	<i>E. coli</i> WP2 <i>trp</i> pKM101	Base-pair substitution Crosslinks	pKM101	Ampicillin
72-003	<i>E. coli</i> WP2 <i>trp uvrA</i> pKM101	Base-pair substitution	pKM101	Ampicillin

**Expected Results:**

Refer to the [MOLTOX](#)<sup>®</sup> lot specific QC statement, internal laboratory historical data and/or your institutional SOP for spontaneous and positive control treatment reversion rates.