



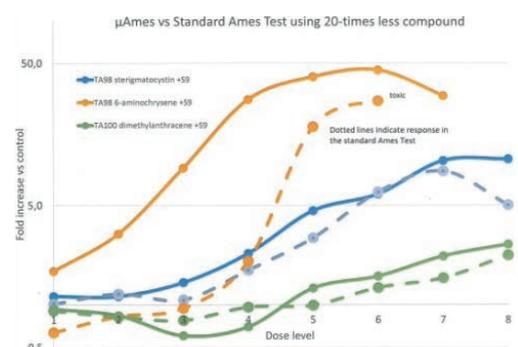
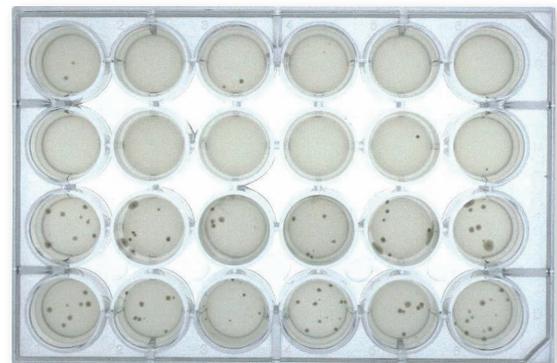
Prepared Kits for Bacterial Mutagenesis

# μAmes Bacterial Mutation Test Kit

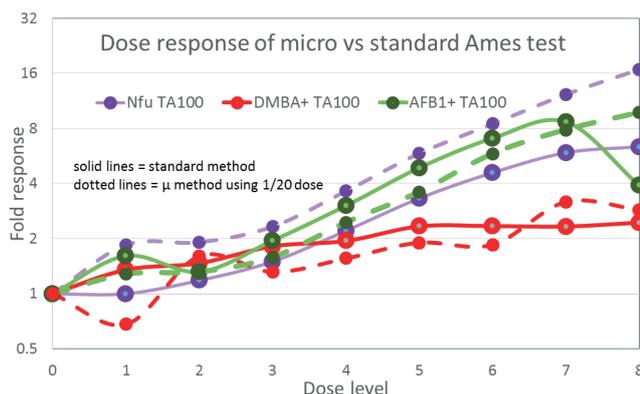
The μAmes kit allows the Ames bacterial mutation test described in OECD guideline 471 to be performed in a miniature, 24-well plate format. The test can be used to evaluate mutagenicity of pharmaceutical impurities when only available in limited amounts – see ICH M7, Assessment and control of DNA reactive impurities in pharmaceuticals to limit potential carcinogenic risk.

Ideal for non-GLP evaluation:

- It uses the same methodology as the standard test with similar sensitivity and specificity
- 95% less test article required
- One technician may perform the test in a single day with results 3 days later
- A colony counter or other special equipment is not required
- It may be used with any of the standard Salmonella and E. coli strains (the five standard strains are included with the kit)
- Each strain is supplied in purified, fully characterized, lyophilized form with appropriate details included on a Quality Control and Formulation Statement
- Phenotype-testing components allow you to confirm the characteristics of the cultures generated in your laboratory
- All reagents and components are included in the kit – you just need the test article and an appropriate solvent



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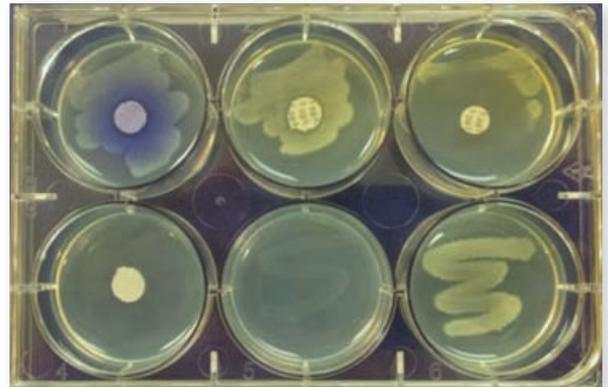


Each compound was tested concurrently in the standard and micro method at 8 dose levels separated by a 2-fold dose interval. The LLOD was defined as the lowest dose expected to produce a clear increase in mutant colony numbers (interpolated where appropriate). The two systems gave parallel results with all compounds. μAmes appears highly predictive of the standard Ames while being less labor-intensive and using 20 times less material. We are extending this validation of the μAmes using weak mutagens to elucidate possible limitations of the screening method.



## Components included in the kit (Cat-No: 31-500)

- 24-well plates with minimal 0.4% glucose agar
- Lyophilized strains Salmonella TA1535, TA1537, TA98, TA100 and E. coli WP2 *trp*, *uvrA*
- 10% S9 Mix lyophilized (MUTAZYME™) incl. sterile water for reconstitution
- Phenotype confirmation plates suitable for any strain to confirm histidine and tryptophan requirement and response to antibiotics
- Four types of antibiotic discs to confirm presence or absence of appropriate plasmids and excision repair
- Phosphate buffer 0.1M pH 7.4
- Nutrient broth in culture bottles and nutrient agar plates
- Top agar complete with histidine, biotin and tryptophan
- Pre-weighed positive control chemicals: sodium azide, 9-aminoacridine-HCl, 2-nitrofluorene, 4-nitroquinoline-N-oxide, 2-aminoanthracene, benzo[a]pyrene



Each kit contains more than enough reagents to test one chemical at 8 dose levels in triplicate, with and without S9 with concurrent positive (in triplicate) and solvent/vehicle (12 replicate wells) on one occasion of testing. It may be used with any E. coli or Salmonella tester strains including TA97a and TA102, if required. Larger experiments will require additional 24-well plates which may be purchased separately.



For information send an E-Mail to [info@trinova.de](mailto:info@trinova.de)

## About Us

TRINOVA BIOCHEM GmbH is the European distributor of MOLTOX®, the leading manufacturer of products used in the Salmonella and E. coli WP2 mutagenicity tests / Ames tests: Minimal glucose agar plates, top agars, Salmonella and E. coli tester strains, frozen and lyophilized S9, MUTAZYME™, NADPH-regenerating systems and positive control chemicals.

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