
ABOUT US

Molecular Toxicology, Inc. is the leading manufacturer of products used in the Salmonella and E. coli WP2 mutagenicity tests. Moltox minimal glucose agar plates, top agars, Salmonella and E. coli tester strains, frozen and lyophilized S9, MUTAZYME™, NADPH-regenerating systems and positive control chemicals are distributed worldwide. Moltox has developed microtiter plate format fluctuation tests consistent with OECD guidelines including Moltox® FT™ tests and distributes the BioReliance Ames II™ test kit.

MOLTOX®

Molecular Toxicology, Inc.

MOLTOX Distributors

EUROPE

Trinova Biochem GmbH
www.trinova.de

INDIA

Krishgen Biosystems
www.krishgen.com

PUERTO RICO

Instrumed
www.instrumed.net

SOUTH KOREA

Woo Jung BSC, Inc.
www.woojungbsc.co.kr

CHINA

Shanghai Bioplus Biotech Co., Ltd.
www.bioplus-biotech.com

BRAZIL

Interlab
www.interlabdis.com.br

NORTH AMERICA

Brand-Nu Laboratories
www.brandnu.com

Fisher Scientific
www.fishersci.com

VWR Scientific
www.vwrsp.com

Contact Us

Molecular Toxicology, Inc.
157 Industrial Park Drive
PO Box 1189
Boone, NC 28607 USA

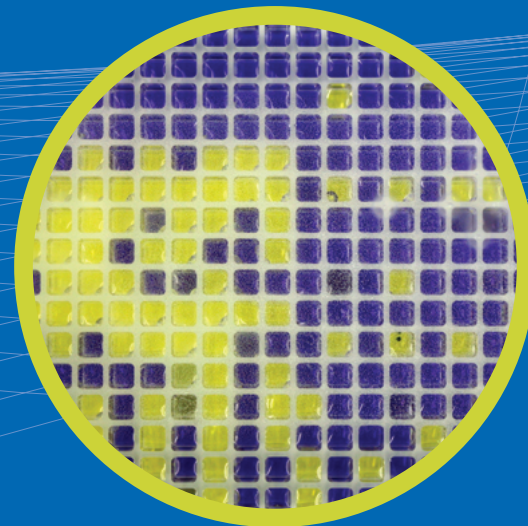
Tel: 828.264.9099
Toll Free: 800.536.7232
Fax: 828.264.0103
Email: Sales@MOLTOX.com

www.MOLTOX.com

MOLTOX®

Molecular Toxicology, Inc.

Ames II™
Mutagenicity Assay
Kit by BioReliance®
#32-102



Ames II[™] Mutagenicity Assay Kit by BioReliance[®]

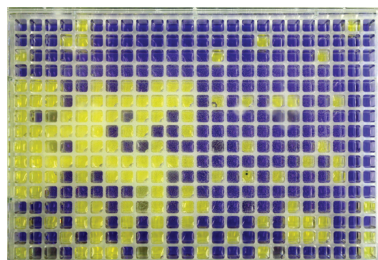
Kit Components

Kit #32-102 includes:

PART # DESCRIPTION

32-71098	TA98 (2 disc inocula/vial)
32-71001	TAMix (2 disc inocula/vial)
32-26007	Ampicillin (50mg)
32-26003	Growth Medium (100mL)
32-26001	Exposure Medium (100mL)
32-26005	Indicator Medium (300mL)
11-401.3L	MUTAZYME [™] (30% S9 Mix, 3.25mL)
32-60127	4-Nitroquinoline-N-oxide (50µg)
32-60111	2-Nitrofluorene (100µg)
32-60107	2-Aminoanthracene (125µg)
32-90002	Software disc

User Instructions Included



384-Well
Microtiter Plate

Basis of the Test

The BioReliance Ames II[™] Mutagenicity Assay Kit measures the mutagenic potential of a test material by measuring its ability to induce reversion of *his*⁻ *Salmonella typhimurium* auxotrophs to their prototrophic condition. The bacterial strains employed in the assays, TA98 and TAMix (a mixture of strains TA7000 through TA7006), have been described by Maron and Ames (Mutat res, 113:173-215, 1983) and Gee, et. al. (PNAS, 91:11606-11610, 1994), respectively. The Ames II[™] assay is performed in liquid culture as a fluctuation test (Gee, et. al., Mutat res, 412:115-130, 1998; Luria and Delbruck, Genetics, 28:491-511, 1943; Green, et. al., Mutat res, 38:33-42, 1976; Gatehouse and Delow, Mutat res, 60:239-252, 1979; McPherson and Nestman, Environ mol mutagen, 16:21-25, 1990). *His*⁻ target cell populations are treated in 24-well plates using media containing limiting L-histidine. After the treatments, the cells are transferred to 48-well sectors of 384-well microtiter dishes in a L-histidine-free medium containing a pH indicator. After 48 hours incubation, cells able to grow in the absence of L-histidine (mutant cells) will have proliferated resulting in media acidification and the appearance of yellow wells. These are scored and the number for each treatment condition compared to their negative control.



Advantages of the Test

- Ames II[™] TAMix strains are combined and used as a single mixture for rapid screening of all base-pair substitution types.
- Combining TAMix with TA98 permits effective screening of both basepair and frameshift mutagens with only two cell cultures.
- The assay is designed to run using the same nonactivation and S9 activation conditions as the traditional Ames test.
- Liquid format in microtiter plates leads to increased sensitivity and facilitates automation.

