

# Uracil-DNA Glycosylase Assay by Matrix-assisted Laser Desorption/Ionization Time-of-flight Mass Spectrometry Analysis

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jove.com/video/63089

## Materials

Name	Company	Catalog Number	Comments
2-Amino-2-hydroxymethyl-propane-1,3-diol (Tris base)	J.T baker		Protocol 1,2
Autoclaved deionized water	MILLIPORE		Protocol 1,2
EDTA	J.T Baker		Protocol 1,2
Gloves	AQUAGLOVE		Protocol 1,2,3
Hydrochloric acid (HCl)	SIGMA		Protocol 1,2
Ice bucket	Taiwan.Inc		Protocol 2
Low retention pipette tips(0.5-10 µL)	extra gene		Protocol 1,2
Low retention pipette tips(1,250 µL)	national scientific supply co, Inc.		Protocol 1,2
Low retention pipette tips(200 µL)	national scientific supply co, Inc.		Protocol 1,2
MassARRAY	Agena Bioscience, CA		Protocol 4, 5 Mass spectrometry control programs include Typer Chip Linker, SpectroACQUIRE, and Start RT Process.
MassARRAY Nanodispenser	AAT Bioquest, Inc.	RS1000	Protocol 3
Microcentrifuge	Kubota		Protocol 2
Microcentrifuge	Clubio		Protocol 2
Microcentrifuge tube (1.5 mL)	National scientific supply co, Inc.		Protocol 2
Microcentrifuge tube rack	Taiwan.Inc		Protocol 1,2
Micropipette (P1000)	Gilson		Protocol 1,2
Micropipette (P2)	Gilson		Protocol 1,2
Micropipette (P10)	Gilson		Protocol 1,2

Micropipette (P100)	Gilson		Protocol 1,2
Micropipette (P200)	Gilson		Protocol 1,2
Micropipette (SL2)	Rainin		Protocol 1,2
Oligonucleotides	Integrated DNA Technologies (Singapore)		Protocol 1,2
Quest Graph IC50 Calculator (v.1)	AAT Bioquest, Inc.		Fig. 4 <a href="https://www.aatbio.com/tools/ic50-calculator-v1">https://www.aatbio.com/tools/ic50-calculator-v1</a>
Sodium hydroxide (NaOH)	WAKO		Protocol 2
SpectroCHIP array	Agena Bioscience, CA	#01509	Protocol 3, 5
Timer	Taiwan.Inc		Protocol 2
Typer 4.0 software	Agena Bioscience, CA	#10145	Protocol 6 Typer 4.0 consists four programs including Assay Designer, Assay Editor, Plate Editor, and Typer Analyzer.
UDG Reaction Buffer (10x)	New England Biolabs, MA	B0280S	Protocol 2
Uracil Glycosylase Inhibitor	New England Biolabs, MA	M0281S	Protocol 2
Uracil-DNA Glycosylase	New England Biolabs, MA	M0280L	Protocol 2
UV-VISIBLE spectrophotometer UV-1601	SHIMADZU		Protocol 1
Water bath	ZETA ZC-4000 (Taiwan.Inc)		Protocol 2