

Heteroduplex Mobility Assay (HMA) Service

Description:

Heteroduplex mobility assay (HMA) is based on the principle that DNA heteroduplexes formed between related sequences have a reduced mobility in polyacrylamide gels proportional to their degree of divergence. The sensitivity of HMA for detecting DNA mutation is higher than any other technique currently available, except for exhaustive DNA sequencing studies.

The HMA in which amplicons from study samples are hybridized (by denaturing and reannealing) to amplicons from reference strains and resolved by electrophoresis. HMA has the potential to provide a simple and rapid means to identify samples containing multiple strains and to establish the diversity of species/strains/variants within the sample.

Measurement of Heteroduplex Mobilities:

The relative mobility of heteroduplexes is typically determined from photographs or video-captured images of ethidium bromide stained polyacrylamide gels. The distance between the two heteroduplexes is measured as given below. Often, when the complexity of the unknown quasispecies is high, more than two heteroduplexes are formed with the reference sequence. In such instances the approximate midpoint between the most prominent heteroduplexes is used.

Heteroduplex Mobility = Distance from the well bottom to the midpoint of heteroduplex bands / Distance from the well bottom to the midpoint of the homoduplex bands

Ordering Information:

Product	Service	Cat #
Heteroduplex Mobility Assay (HMA)	Per Sample	116703

Features:

- Heteroduplex analysis has been widely used in viral epidemiology, analysis of human genetic disorders; identify genetic differences in closely related microbial strains and to assess the similarity of sequences in clone libraries
- DNA fragments within 700 bp size can be resolved
- Well documented results showing homoduplex and heteroduplex band patterns
- Large number of samples can be analysed very fast and only the variant can be sequenced.

Deliverables:

1. Documents showing homoduplex and heteroduplex banding pattern on polyacrylamide gel.
2. Final report with details of protocol followed.

Delivery time: Please Inquire

Note: Please Contact
geneiservice@sanmargroup.com

Service Tax as applicable will be charged extra