DNA unwinding assay using streptavidin-bound oligonucleotides.
BACKGROUND: Helicases play essential roles in many cellular processes including replication, transcription and ... duplex unwinding from a substrate that contains only one single-stranded overhang region is difficult to determine.

RESULTS: An improved assay to determine helicase directionality was developed that uses a substrate containing ... substrate that can be used to determine the directionality of both 3'--> 5' and 5'--> 3' helicases was developed.

CONCLUSION: It is shown here that the use of a biotin-streptavidin complex as a helicase substrate improves helicase activity and the determination of helicase directionality. The method described is simpler that the currently available techniques.