## Open Peer Review on Qeios

## **COLD-PCR**

National Cancer Institute

## Source

National Cancer Institute. <u>COLD-PCR</u>. NCI Thesaurus. Code C99486.

A modification of the standard polymerase chain reaction that increases the ability to preferentially amplify minority alleles and somatic mutations in the presence of an excess of wild-type molecules. Sequence-variant molecules are preferentially selected by the lower melting temperature of their mismatched heteroduplex after they've annealed to a wild-type molecule that is present in excess. By carefully selecting the denaturing temperature below the T m for the wild-type molecule, only the mismatch heteroduplexes will melt and act as efficient templates for strand synthesis.