Base pair that achieves pair recognition through hydrophobic interactions.

The dNaM and d5SICS matched pair appears to be a very interesting novel base pair. These unnatural C-nucleosides have pair recognition that rivals the A-T and G-C pairing in the natural genetic alphabet. In addition, they have been shown to be well-replicated by DNA polymerases under steady-state conditions, regardless of sequence. The fidelity and efficiency of dNaM and d5SICS replication approach those of natural synthesis. Both dNaM and d5SICS are also efficiently transcribed by T7 RNA polymerase in either direction.

References