A stereoselective reaction in which the possible products are diastereomers is said to be diastereoselective.

eg:

Experimentally, 2 is the major product; 3 is the minor product. Since 2 and 3 are diastereomers, the overall reaction between 1 and H₂ is diastereoselective.

A stereoselective reaction in which the possible products are enantiomers is said to be enantioselective.

Experimentally, 5 is the major product; 6 is the minor product. Since 5 and 6 are enantiomers, the overall reaction is enantioselective.

Diastereoselective reactions are very common. In contrast, enantioselective reactions are rare because they require special chiral reagents or catalysts. Therefore, the term stereoselective is casually used to mean diastereoselective.

Contributors

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