

primary isotope effect

A kinetic isotope effect attributable to isotopic substitution of an atom to which a bond is made or broken in the rate-controlling step or in a pre-equilibrium step of a specified reaction. The corresponding isotope effect on the equilibrium constant of a reaction in which one or more bonds to isotopic atoms are broken, is called a 'primary equilibrium isotope effect'.

See also: secondary isotope effect

Source:

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1130