

## ligases (synthetases)

Enzymes that catalyse the ligation of two molecules with concomitant hydrolysis of the pyrophosphate bond in adenosine 5'-triphosphate (ATP) or a similar triphosphate, forming C–C , C–O , C–S , P–O or C–N bonds. In recombinant DNA technology, ligases covalently join together two sequences of DNA (e.g. host DNA and foreign DNA) by a phosphodiester bond.

**Source:**

PAC, 1992, 64, 143 (*Glossary for chemists of terms used in biotechnology (IUPAC Recommendations 1992)*) on page 159