

## ion pumps

Ion pumps enable ions to flow through membranes in a thermodynamically uphill direction by the use of an energy source such as ATP or light. They consist of sugar-containing hetero-peptide assemblies, which open and close upon the binding and subsequent hydrolysis of ATP, usually transporting more than one ion towards the outside or the inside of the membrane.

**Source:**

PAC, 1997, 69, 1251 (*Glossary of terms used in bioinorganic chemistry (IUPAC Recommendations 1997)*) on page 1281