

iron-sulfur proteins

Proteins in which non-haem iron is coordinated with cysteine sulfur and usually also with inorganic sulfur. Divided into three major categories: rubredoxins; 'simple iron-sulfur proteins', containing only iron-sulfur clusters; and 'complex iron-sulfur proteins', containing additional active redox centres such as flavin, molybdenum or haem. In most iron-sulfur proteins, the clusters function as electron-transfer groups, but in others they have other functions, such as catalysis of hydratase/dehydratase reactions, maintenance of protein structure, or regulation of activity.

Source:

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