

THUMBNAI
NOT
AVAILABLE

DOWNLOAD



How Do Amino Acids Transport Electrons Through Peptides?

By Meike Cordes

Cuvillier Verlag Mai 2008, 2008. Taschenbuch. Book Condition: Neu. 147x20x17 mm. Neuware - A peptide model was designed, which allows the investigation of amino acid side chain participation in ET through peptides. Aromatic amino acids function as oxidizable spectroscopic sensors for the direct observation of charged intermediates during the ET process. Tyrosine as electron donor, situated at the N-terminus of the peptide, provides driving force for the ET process and is irreversibly oxidized to a long-lived phenoxyl radical with a sharp absorption band. Two methoxysubstituted phenylalanine derivatives were chosen as additional spectroscopic sensors, yielding oxidized transients with different absorption spectra. They were synthesized in their enantiopure form and investigated with respect to their electrochemical and spectroscopical properties. In the peptide model, they function as C-terminal electron acceptor precursor and central relay, separated from each other and the donor by a proline matrix. The electron acceptor can be generated by laser irradiation of an injection unit, containing a tbutyl ketone as chromophore. Transient absorption spectra recorded 40 ns after the laser flash were used for the examination of intramolecular ET efficiencies between the redox sites. The observation of intramolecular ET from the N-terminus to the C-terminus of a nonapeptide, which consisted...



READ ONLINE
[8.53 MB]

Reviews

Merely no words to describe. I have got study and i am confident that i am going to planning to go through yet again once again in the foreseeable future. You will like just how the writer compose this publication.

-- **Devante Schmitt**

Complete guideline! Its this sort of excellent read. I could comprehended every little thing out of this written e publication. Its been designed in an remarkably easy way and it is only right after i finished reading this publication by which really transformed me, affect the way i think.

-- **Prof. Shanie Schinner Sr.**