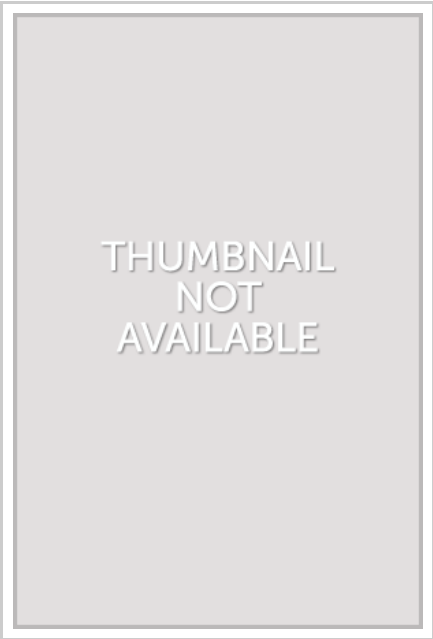

DOWNLOAD PDF

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
[2.1 MB]

Reviews

A top quality publication along with the font used was intriguing to read. I really could comprehended everything using this written e ebook. Its been designed in an remarkably straightforward way and it is only after i finished reading through this publication by which basically altered me, modify the way i believe.

-- ***Cathrine Larkin Sr.***

Very useful to all of group of people. I actually have read through and so i am certain that i will planning to study yet again once again down the road. I am just very easily can get a satisfaction of looking at a created book.

-- ***Mark Bernier***