


Certificate of Analysis

Catalog Number	BP16184
Product Name	Transdermal Peptide acetate(888486-23-5 free base)

Physical and Chemical Properties

Synonyms	TD 1 (peptide) acetate
Chemical Formula	C42H68N14O18S2
Molecular Weight	1121.2
Solubility	DMSO: 2.5 mM
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	

Product Information

Description	Transdermal Peptide (TD 1 peptide) acetate is a 11-amino acid peptide, binds to Na ⁺ /K ⁺ -ATPase beta-subunit (ATP1B1), and mainly interacts with the C-terminus of ATP1B1. Transdermal Peptide can enhance the transdermal delivery of many macromolecules. Transdermal Peptide TD 1 Amide is novel peptide designed to enhance transdermal drug delivery.
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In vitro	<p>In the presence of Transdermal Peptide, because of the specific binding of Transdermal Peptide to ATP1B1, cells will upregulate the level of ATP1B1 to maintain function and structure; as a result, the expression of ATP1B1 increases. However, as time goes on, some Transdermal Peptide molecules may be transported into cells by endocytosis; consequently, the expression of ATP1B1 then decreases. The interaction between Transdermal Peptide and ATP1B1 changes not only the expression of ATP1B1, but also the localization of ATP1B1 and then the structure of the epidermal layer. This interaction can be attenuated by inhibitors or competitors, which would result in the reduced delivery of macromolecular drugs across the skin.</p>
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Analytical Data

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	<p>Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.</p>

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