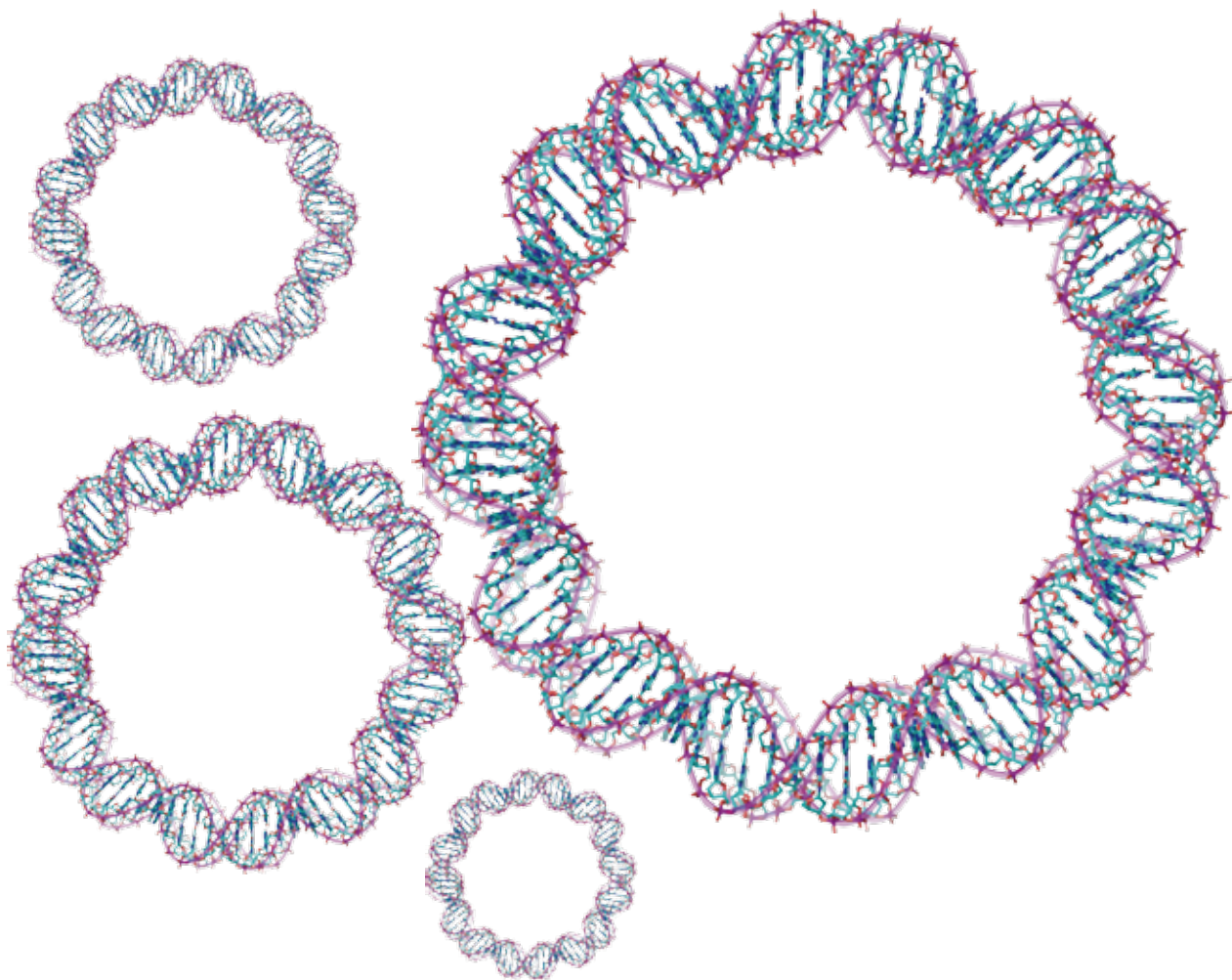


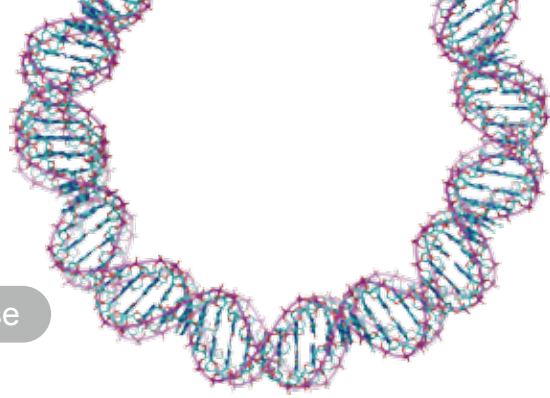
Beta Amyloid Peptides

— The Most Comprehensive Collection
for Alzheimer's Disease



Y Academic Services

Y Pharmaceutical Services



Beta Amyloid Peptides

— The Most Comprehensive Collection for Alzheimer's Disease

- **Proprietary FlexPeptide™ technology** with combined platform, microwave and ligation system used for amyloid peptide synthesis.
- **Higher quality with less expensive price.**
- **Superior Purity— All products' purity >95%.**
- **Rigorous QC Test— Products must pass extensive quality control, such as HPLC, MS, etc.**
- **Wide Selection— Over 59 amyloid products available. We also provide customized peptides on special request.**
- **Quick Ordering System— All products are in stock and promptly shipped following purchase.**
- **State-of-The-Art Facilities— GMP**

What are Beta Amyloid Peptides

Beta amyloid is a protein fragment that forms amyloid plaques in the brain of Alzheimer's disease (AD) patients. Beta amyloid peptide consists of 43 amino acids. It is created via the enzymatic digestion of amyloid precursor protein (APP) by beta secretase and gamma secretase. It then forms insoluble fibrous aggregates, causing amyloidosis and neurodegenerative diseases such as AD. Due to beta amyloid's pathology, it has become one of the most investigated molecules in Alzheimer's disease research.

Why choose our Beta Amyloid Peptides

GenScript's FlexPeptide™ system and click peptide platform allows us to synthesize a comprehensive array of human and rat beta amyloid peptide fragments. Testing these fragments can help elucidate the dynamic biological interactions of beta amyloid peptide and facilitate a better understanding of Alzheimer's disease at the molecular level. At GenScript, we are dedicated to providing the most current and highest quality reagents in the global effort to treat and find a cure for Alzheimer's disease. With our philosophy of always striving to be on the forefront of new technology and its application in treating disease, you can be confident you have a committed partner to further your research and future innovations.

Advanced Technologies

1. FlexPeptide™ Technology includes:

a. Combined platform

GenScript has several LPPS and SPSS methods that ensure high peptide synthesis success rates.

b. Microwave technology

The smart and efficient way to optimize peptide synthesis yield

c. Ligation technology

Long peptides up to 200 aa can be synthesized.

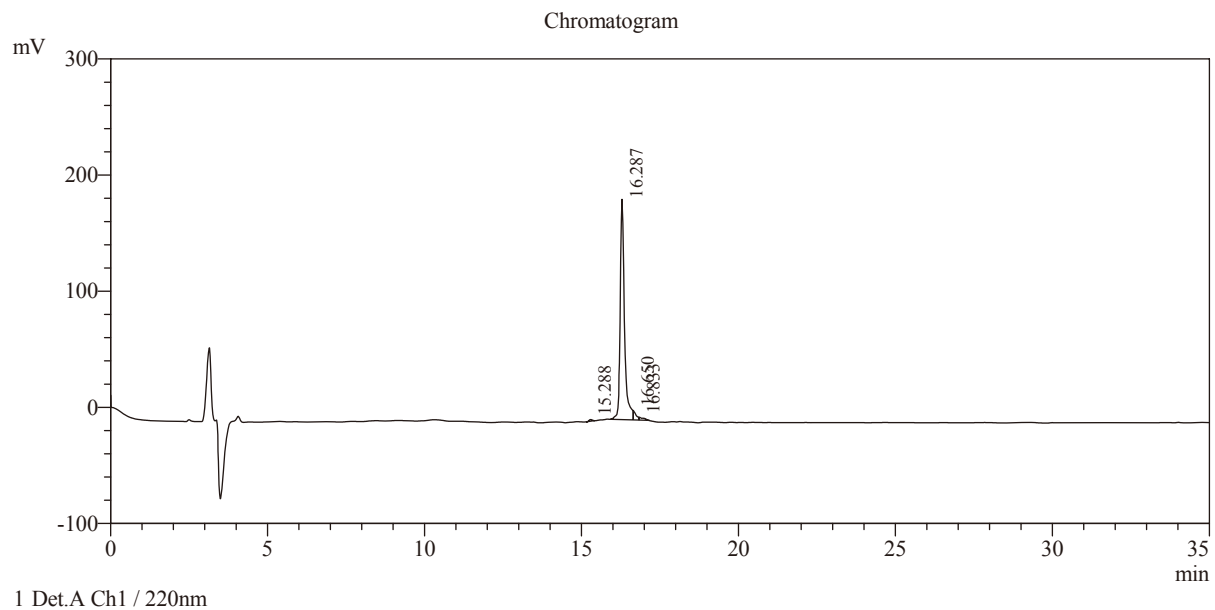
Case study : β -Amyloid (1-40)

Sequence: Asp - Ala - Glu - Phe - Arg - His - Asp - ... - Leu - Met - Val - Gly - Gly - Val - Val

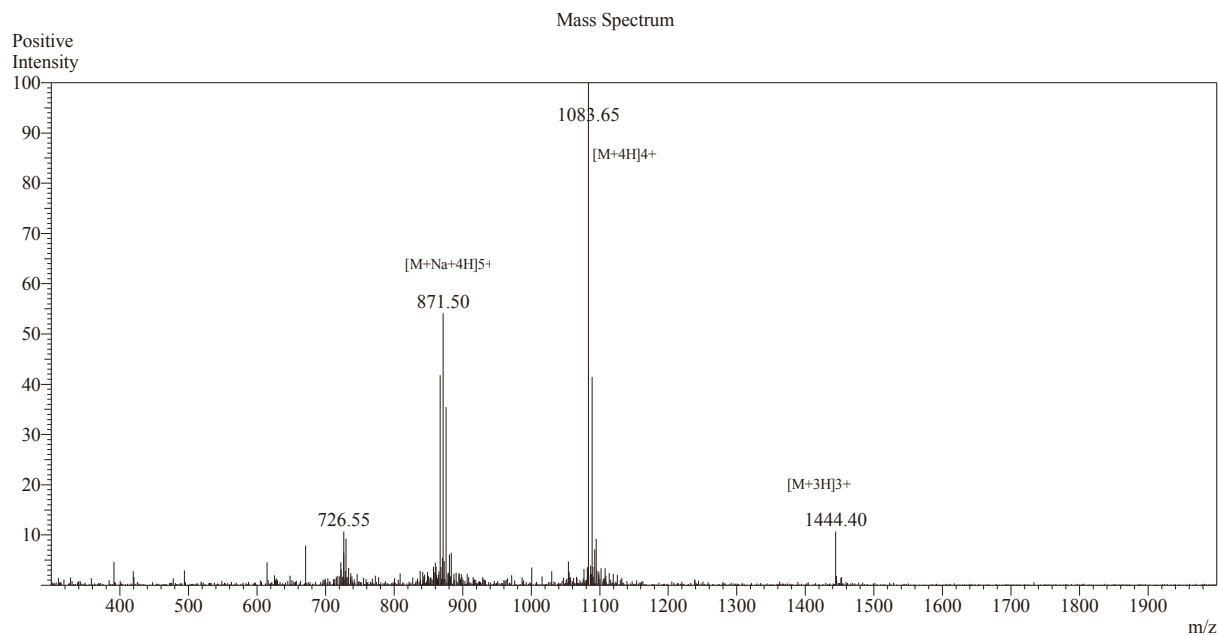
Length: 40 aa

Purity: 95.55%

HPLC results



MS results



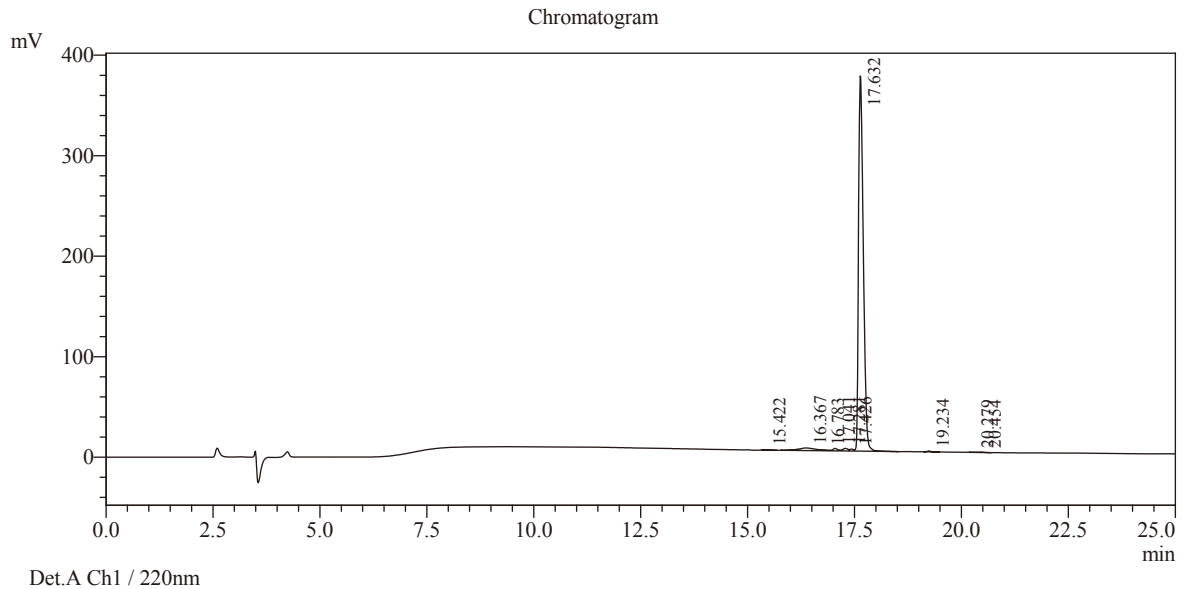
Case study III: β -Amyloid (25-35)

Sequence: Gly - Ser - Asn - Lys - Gly - Ala - Ile - Ile - Gly - Leu - Met

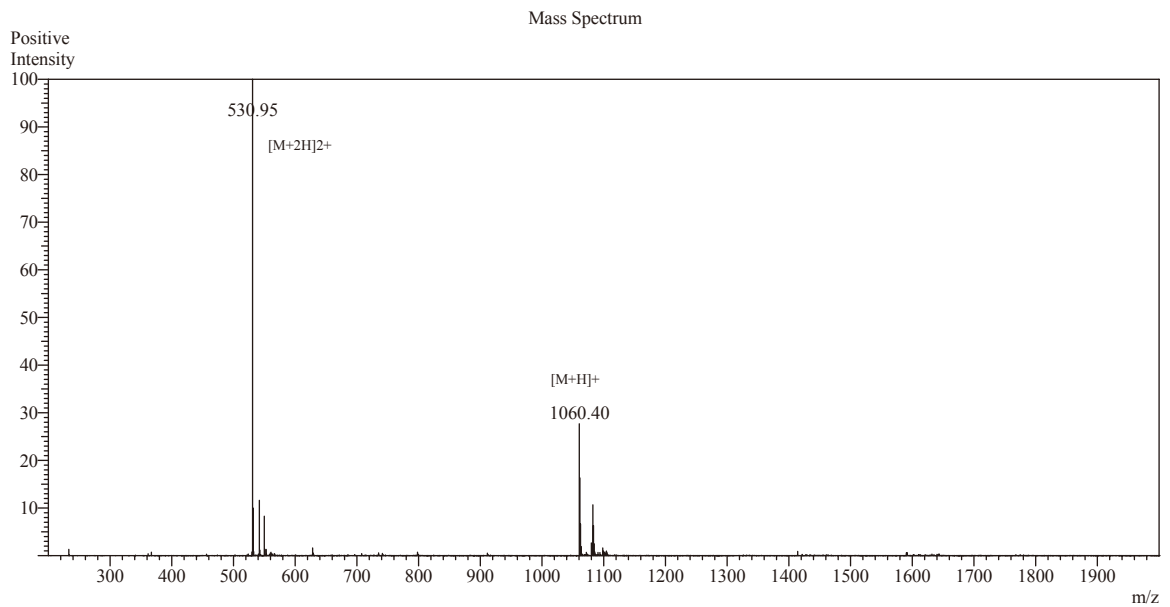
Length: 11 aa

Purity: 95.18%

HPLC results

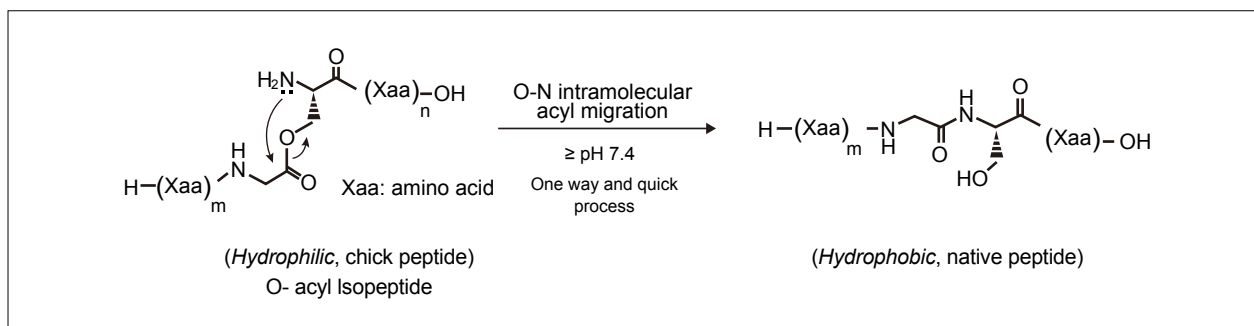


MS results



2. Click Peptide Platform

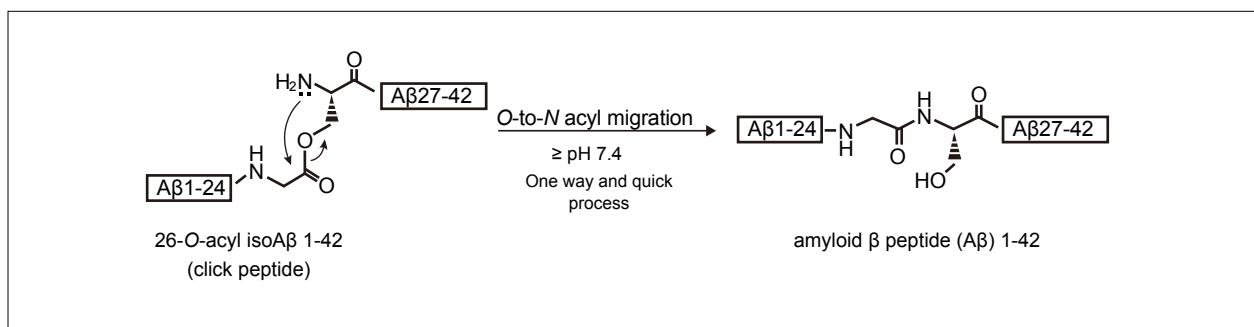
The preparation of hydrophobic peptides like beta-amyloid can be a time consuming process. Even after peptides are successfully prepared, proper dissolving of peptides is critical. At GenScript, our featured click peptide platform is specially designed to handle the low water-solubility and aggregative nature of hydrophobic peptides.



A click peptide based on the O-acyl isopeptide method

Case Study :

26-O-acyl β -amyloid (1-42) click peptide was successfully synthesized. The β -ester bond was quickly and quantitatively converted to a native Gly25-Ser26 amide bond via a pH-dependent O-N intramolecular acyl migration reaction ($t_{1/2} = 1 \text{ min}$, $\text{pH } 7.4$, 37°C) at a hydroxyamino acid residue. Namely, upon this pH-triggered conversion (pH-click), the non-aggregative and water-soluble precursor (click peptide) can produce the monomer with a random-coil structure under physiological conditions ($\text{pH } 7.4$, 37°C). The structure information is as follows.

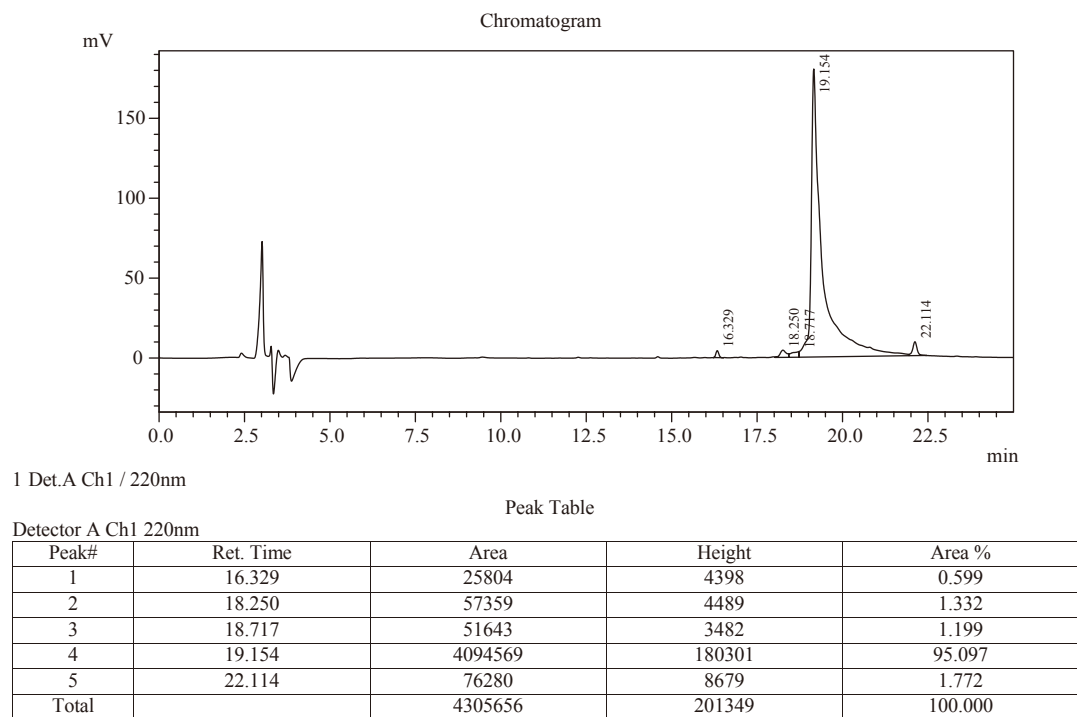


β -amyloid (1-42) click peptide

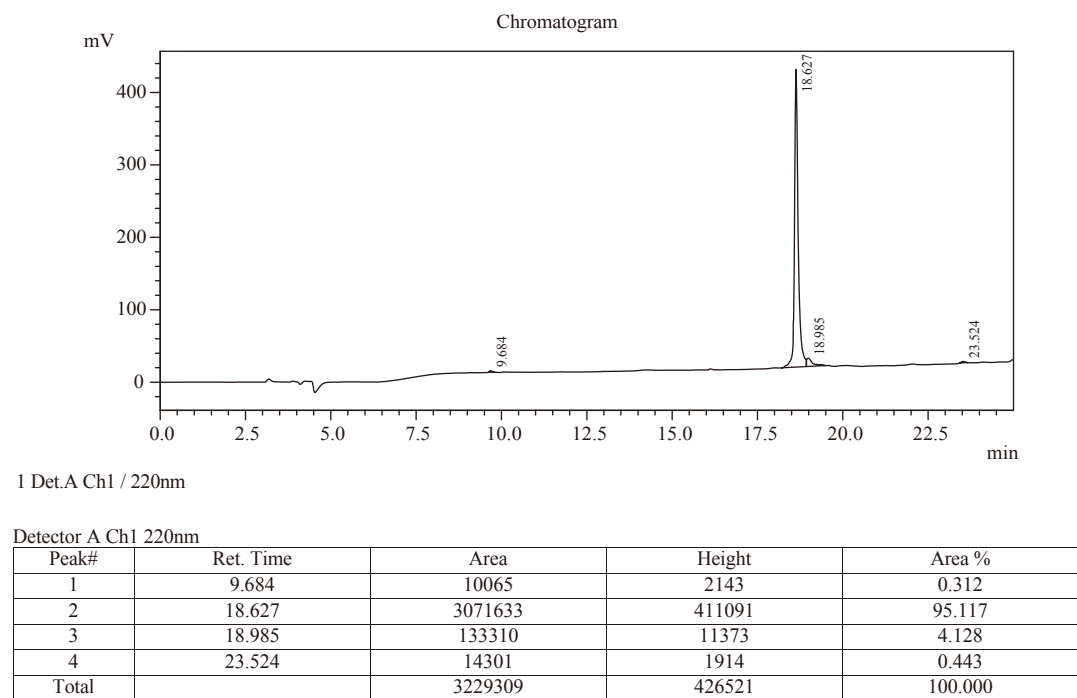
Results

- β -amyloid precursor(click peptide) has a water solubility of 15 mg/ml, while it is only 0.14 mg/ml for the native peptide.
- The aggregative property of the peptide is significantly reduced.
- The O-acyl moiety was stable under acidic pH.

The following are HPLC reports of purified β -amyloid (1-42) native peptide converted from β -amyloid (1-42) click peptide (precursor) and purified 26-O-acyl β -amyloid (1-42) click peptide (precursor).



HPLC report of purified β -amyloid (1-42) native peptide converted from β -amyloid (1-42) click peptide (precursor)



Ordering List:

Category	Cata No.	Purity	Name	Size
Signal Transduction Peptides	RP10002-0.5	>95%	β -Amyloid (1-28)	0.5 mg
Signal Transduction Peptides	RP10004-0.5	>95%	β -Amyloid (1-40)	0.5 mg
Signal Transduction Peptides	RP10004-1	>95%	β -Amyloid (1-40)	1 mg
Signal Transduction Peptides	RP10008-1	>95%	β -Amyloid (25-35)	1 mg
Signal Transduction Peptides	RP10008-5	>95%	β -Amyloid (25-35)	5 mg
Signal Transduction Peptides	RP10013-0.5	>95%	β -Amyloid (1-42), rat	0.5 mg
Signal Transduction Peptides	RP10013-1	>95%	β -Amyloid (1-42), rat	1 mg
Signal Transduction Peptides	RP10016-0.5	>95%	β -Amyloid (1-40), rat	0.5 mg
Signal Transduction Peptides	RP10016-1	>95%	β -Amyloid (1-40), rat	1 mg
Signal Transduction Peptides	RP10017-0.5	>95%	β -Amyloid (1-42), human	0.5 mg
Signal Transduction Peptides	RP10017-1	>95%	β -Amyloid (1-42), human	1 mg
Signal Transduction Peptides	RP10034-0.5	>95%	β -Amyloid (42-1)	0.5 mg
Signal Transduction Peptides	RP10034-1	>95%	β -Amyloid (42-1)	1 mg
Signal Transduction Peptides	RP20101	>95%	β -amyloid (1-33)	0.5 mg
Signal Transduction Peptides	RP20102	>95%	β -amyloid (11-22)	0.5 mg
Signal Transduction Peptides	RP20103	>95%	β -amyloid (1-16)	0.5 mg
Signal Transduction Peptides	RP20104	>95%	β -amyloid (12-28)	0.5 mg
Signal Transduction Peptides	RP20105	>95%	β -amyloid (18-28)	1 mg
Signal Transduction Peptides	RP20106	>95%	β -amyloid (1-11)	1 mg
Signal Transduction Peptides	RP20130-1	>95%	β -Amyloid (22-35)	1 mg
Signal Transduction Peptides	RP20130-5	>95%	β -Amyloid (22-35)	5 mg
Signal Transduction Peptides	RP20138	>95%	β -Amyloid (1-37)	0.5 mg
Signal Transduction Peptides	RP20139	>95%	β -Amyloid (1-36)	0.5 mg
Signal Transduction Peptides	RP20140	>95%	β -Amyloid (1-34)	0.5 mg
Signal Transduction Peptides	RP20141	>95%	β -Amyloid (1-15)	1 mg
Signal Transduction Peptides	RP20142	>95%	β -Amyloid (26-40)	1 mg
Signal Transduction Peptides	RP20143	>95%	β -Amyloid (30-34)	1 mg
Signal Transduction Peptides	RP20144	>95%	β -Amyloid (33-40)	1 mg
Signal Transduction Peptides	RP20145	>95%	β -Amyloid (35-42)	1 mg
Signal Transduction Peptides	RP20146	>95%	β -Amyloid (8-38)	1 mg
Signal Transduction Peptides	RP20148	>95%	β -Amyloid (17-24)	1 mg

Category	Cat No.	Purity	Name	Size
Signal Transduction Peptides	RP20150	>95%	β -Amyloid (22-40)	1 mg
Signal Transduction Peptides	RP20152	>95%	β -Amyloid (16-23)	1 mg
Signal Transduction Peptides	RP20153	>95%	β -Amyloid (16-24)	1 mg
Signal Transduction Peptides	RP20154	>95%	β -Amyloid (16-26)	1 mg
Signal Transduction Peptides	RP20160	>95%	β -Amyloid (1-9)	1 mg
Signal Transduction Peptides	RP20161	>95%	β -Amyloid (1-17)	1 mg
Signal Transduction Peptides	RP20162	>95%	β -Amyloid (1-20)	1 mg
Signal Transduction Peptides	RP20163	>95%	β -Amyloid (10-35)	1 mg
Signal Transduction Peptides	RP20165	>95%	β -Amyloid A4 Protein Precursor (740-770), APP (C31)	1 mg
Signal Transduction Peptides	RP20166	>95%	β -Amyloid (1-40) Binding Peptide	1 mg
Signal Transduction Peptides	RP20168	>95%	Cys Containing β -Amyloid (1-40) Binding Peptide	1 mg
Signal Transduction Peptides	RP20169	>95%	Parallel topology β -Amyloid modified peptide	1 mg
Signal Transduction Peptides	RP20170	>95%	β -Amyloid (13-27)	1 mg
Signal Transduction Peptides	RP20171-1	>95%	β -Amyloid (15-21)	1 mg
Signal Transduction Peptides	RP20171-5	>95%	β -Amyloid (15-21)	5 mg
Signal Transduction Peptides	RP20172-1	>95%	β -Amyloid (16-20)	1 mg
Signal Transduction Peptides	RP20172-5	>95%	β -Amyloid (16-20)	5 mg
Signal Transduction Peptides	RP20173-1	>95%	β -Amyloid (4-10)	1 mg
Signal Transduction Peptides	RP20173-5	>95%	β -Amyloid (4-10)	5 mg
Signal Transduction Peptides	RP20174	>95%	β -Amyloid (10-20)	0.5 mg
Signal Transduction Peptides	RP20175	>95%	β -Amyloid (12-20)	1 mg
Signal Transduction Peptides	RP20177-1	>95%	β -Amyloid (32-35)	1 mg
Signal Transduction Peptides	RP20177-5	>95%	β -Amyloid (32-35)	5 mg
Signal Transduction Peptides	RP20178-1	>95%	β -Amyloid (29-40)	1 mg
Signal Transduction Peptides	RP20178-5	>95%	β -Amyloid (29-40)	5 mg
Signal Transduction Peptides	RP20184-1	>95%	β -Amyloid (31-35)	1 mg
Signal Transduction Peptides	RP20184-5	>95%	β -Amyloid (31-35)	5 mg

Category	Cat No.	Purity	Name	Size
Signal Transduction Peptides	RP20185-0.5	>95%	β -Amyloid (35-25)	0.5 mg
Signal Transduction Peptides	RP20185-1	>95%	β -Amyloid (35-25)	1 mg
Signal Transduction Peptides	RP20185-5	>95%	β -Amyloid (35-25)	5 mg
Signal Transduction Peptides	RP20186	>95%	β -Amyloid (37-43)	1 mg
Signal Transduction Peptides	RP20192	>95%	β -Amyloid (7-22)	1 mg
Signal Transduction Peptides	RP20195	>95%	β -Amyloid Protein Precursor (657-676)	0.5 mg
Signal Transduction Peptides	RP20196-1	>95%	β -Amyloid Protein Precursor 770 (135-155)	1 mg
Signal Transduction Peptides	RP20196-5	>95%	β -Amyloid Protein Precursor 770 (135-155)	5 mg
Signal Transduction Peptides	RP20207	>95%	Mca-(Asn ⁶⁷⁰ ,Leu ⁶⁷¹)-Amyloid β /A4 Protein Precursor770 (667-675)-Lys(Dnp)	1 mg
Signal Transduction Peptides	RP20208	>95%	Mca-(Asn ⁶⁷⁰ ,Leu ⁶⁷¹)-Amyloid β /A4 Protein Precursor770 (667-675)-Lys(Dnp), amide	1 mg
Signal Transduction Peptides	RP20265	>95%	Beta-Amyloid (10-25)	1 mg
Signal Transduction Peptides	RP20266	>95%	Amyloid Precursor Protein (APP) (751-770)	1 mg
Signal Transduction Peptides	RP20278	>95%	Beta-Amyloid (36-42)	1 mg
Signal Transduction Peptides	RP20352	>95%	Beta-amyloid peptide (1-8)	1 mg
Signal Transduction Peptides	RP20367	>95%	Beta-amyloid(33-42)	1 mg
Signal Transduction Peptides	RP20405	>95%	Beta-Amyloid (11-17)	1 mg
Signal Transduction Peptides	RP20483	>95%	Cys-Beta-Amyloid (25-35)	1 mg
Signal Transduction Peptides	RP20505	>95%	Beta-Amyloid(1-14),mouse, rat	1 mg
Signal Transduction Peptides	RP20527-0.5	>95%	β -Amyloid (1-42), human	0.5 mg
Signal Transduction Peptides	RP20527-1	>95%	β -Amyloid (1-42), human	1 mg
Signal Transduction Peptides	RP20528-0.5	>95%	β -Amyloid (1-40)	0.5 mg
Signal Transduction Peptides	RP20528-1	>95%	β -Amyloid (1-40)	1 mg

- GenScript offer customized bulk synthesis, please send your request via product@genscript.com
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- For related amyloid antibodies, visit <http://www.genscript.com/antibody-list/A/1.html>

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