(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
20 February 2025 (20.02.2025)

WIPO | PCT

(10) International Publication Number
WO 2025/038979 A1

(51) International Patent Classification:
C07K 14/47 (2006.01) *C07K 14/00* (2006.01)
A61K 38/17 (2006.01) *G01N 33/68* (2006.01)
A61P 25/28 (2006.01)

(21) International Application Number:
PCT/US2024/042811

(22) International Filing Date:
16 August 2024 (16.08.2024)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/520,068 16 August 2023 (16.08.2023) US

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, CV,

(54) Title: COMPOSITIONS AND METHODS FOR PROPHYLAXIS AND/OR TREATMENT OF AMYLOID B PEPTIDE PROTEINOPENIA IN ALZHEIMER'S AND OTHER DISEASES

Sequence ID#	N-Terminal Domain			Middle Domain	C-Terminal Domain									
	N-term.	1	2-18	19-24	25-33	34	35	36	37	38	39	40	41	42	C-term.
SEQ ID NO:1	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAIIG	L	M	V	G	G	V	V	I	A	OH
SEQ ID NO:2	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAIIG	L	M	V	G	G	V	V	I		OH
SEQ ID NO:3	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAIIG	L	M	V	G	G	V	V			OH
SEQ ID NO:4	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAIIG	L	M	V	G	G	V				OH
SEQ ID NO:5	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAIIG	L	M	V	G	G					OH
SEQ ID NO:6	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAIIG	L	M	V	G						OH
SEQ ID NO:7	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAIIG	L	M	V							OH
SEQ ID NO:8	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAIIG	L	M								OH
SEQ ID NO:9	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAIIG	L									OH
SEQ ID NO:10	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAIIG										OH
SEQ ID NO:11	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAII										OH
SEQ ID NO:12	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGAI										OH
SEQ ID NO:13	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKGA										OH
SEQ ID NO:14	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKG										OH
SEQ ID NO:15	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNK										OH
SEQ ID NO:16	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKPAIIG	L	M	V	G	G	V	V	I	A	OH
SEQ ID NO:17	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKKAIIG	L	M	V	G	G	V	V	I	A	OH
SEQ ID NO:18	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKRAIIG	L	M	V	G	G	V	V	I	A	OH
SEQ ID NO:19	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKHAIIG	L	M	V	G	G	V	V	I	A	OH
SEQ ID NO:20	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKEAIIG	L	M	V	G	G	V	V	I	A	OH
SEQ ID NO:21	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKDAIIG	L	M	V	G	G	V	V	I	A	OH
SEQ ID NO:22	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKSAIIG	L	M	V	G	G	V	V	I	A	OH
SEQ ID NO:23	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKTAIIG	L	M	V	G	G	V	V	I	A	OH
SEQ ID NO:24	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKNAIIG	L	M	V	G	G	V	V	I	A	OH
SEQ ID NO:25	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKQAIIG	L	M	V	G	G	V	V	I	A	OH
SEQ ID NO:26	H	D	AEFRHDSGYEVHHQKLV	FFAEDV	GSNKCAIIG	L	M	V	G	G	V	V	I	A	OH

FIG. 1A

(57) Abstract: Material compositions and/or methods useful for the prophylaxis and/or treatment of protein depletion (proteinopenia) are provided, including material compositions that retains native function of a peptide/protein while limiting and/or preventing amyloid formation and/or aggregation of said peptide/protein. Material compositions and formulations for enhancing peptide/protein solubility, stability, circulation time, receptor interaction, brain penetrance, CSF half-life, facilitating peptide/protein synthesis and purification are also provided.

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[Continued on next page]

GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*
— *with sequence listing part of description (Rule 5.2(a))*