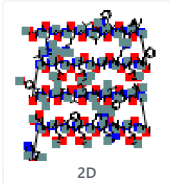


COMPOUND SUMMARY

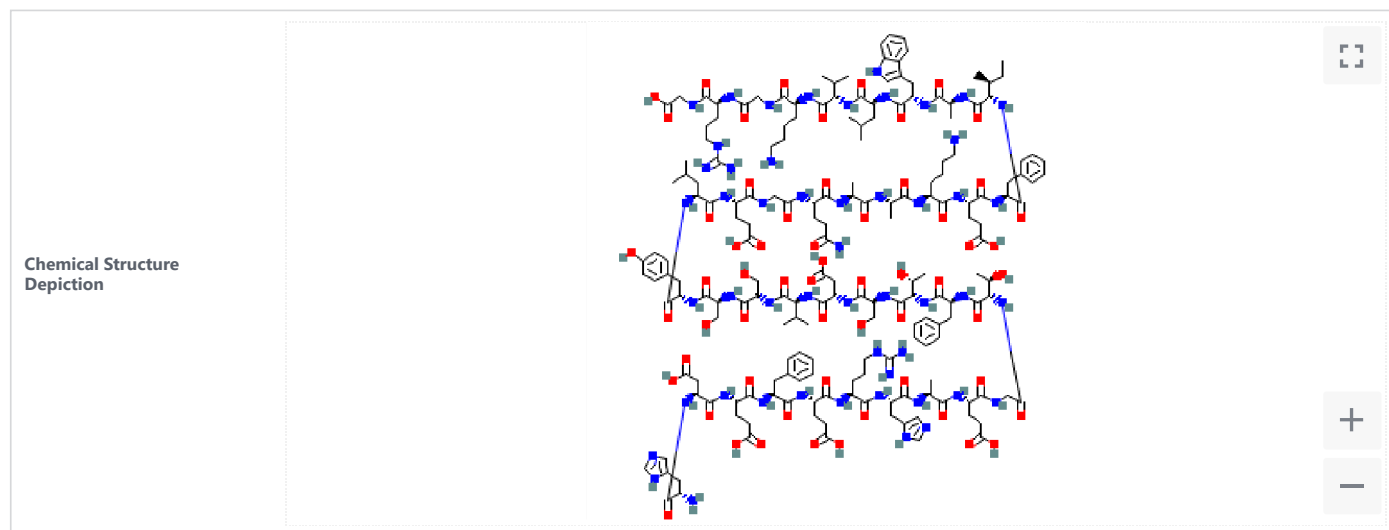
Glucagon-like peptide 1 (1-37)

PubChem CID	16131070
Structure	 2D Find Similar Structures
Molecular Formula	C₁₈₆H₂₇₅N₅₁O₅₉
Synonyms	87805-34-3 Glucagon-like peptide 1 (1-37) GLP-1 (1-37) (human, bovine, guinea pig, mouse, rat) trifluoroacetate salt UNII-SQ6SA9L9XQ SQ6SA9L9XQ More...
Molecular Weight	4169
Dates	Modify Create 2023-02-25 2007-07-03

1 Structures



1.1 2D Structure



► PubChem

1.2 3D Status



Conformer generation is disallowed since too many atoms, too flexible

► PubChem

SVG Image

H—His — Asp — Glu — Phe — Glu — Arg — His — Ala — Glu — Gly

Thr — Phe — Thr — Ser — Asp— Val — Ser — Ser — Tyr — Leu

Glu — Gly — Gln — Ala — Ala — Lys — Glu — Phe— Ile — Ala

Trp — Leu — Val — Lys — Gly — Arg — Gly—OH

IUPAC Condensed	H-His-Asp-Glu-Phe-Glu-Arg-His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys-Glu-Phe-Ile-Ala-Trp-Leu-Val-Lys-Gly-Arg-Gly-OH
Sequence	HDEFERHAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG
PLN	H-HDEFERHAEGTFTSDVSSYLEGQAAKEFIAWLVKGRG-OH
HELM	PEPTIDE1{H.D.E.F.E.R.H.A.E.G.T.F.T.S.D.V.S.S.Y.L.E.G.Q.A.A.K.E.F.I.A.W.L.V.K.G.R.G}\$\$\$\$
IUPAC	L-histidyl-L-alpha-aspartyl-L-alpha-glutamyl-L-phenylalanyl-L-alpha-glutamyl-L-arginyl-L-histidyl-L-alanyl-L-alpha-glutamyl-glycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L-alpha-aspartyl-L-valyl-L-seryl-L-seryl-L-tyrosyl-L-leucyl-L-alpha-glutamyl-glycyl-L-glutaminy-L-alanyl-L-alanyl-L-lysyl-L-alpha-glutamyl-L-phenylalanyl-L-isoleucyl-L-alanyl-L-tryptophyl-L-leucyl-L-valyl-L-lysyl-glycyl-L-arginyl-glycine

► [PubChem](#)

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Computed by InChI 1.0.6 (PubChem release 2021.05.07)



Computed by InChI 1.0.6 (PubChem release 2021.05.07)



Computed by OEChem 2.3.0 (PubChem release 2021.05.07)



CC[C@H](C)[C@@H](C(=O)N[C@@H](C)C(=O)N[C@@H](CC1=CNC2=CC=CC=C21)C(=O)N[C@@H](CC(C)C)C(=O)N[C@@H](CCCCN)C(=O)NCC(=O)N[C@@H](CCCNC(=N)N)C(=O)NCC(=O)O)NC(=O)[C@H](CC3=CC=CC=C3)NC(=O)[C@H](CCC(=O)O)NC(=O)[C@H](CCCCN)NC(=O)[C@H](C)NC(=O)[C@H](C)NC(=O)[C@H](CCC(=O)N)NC(=O)CNC(=O)[C@H](CCC(=O)O)NC(=O)[C@H](CC(C)C)NC(=O)[C@H](CC4=CC=C(C=C4)O)NC(=O)[C@H](CO)NC(=O)[C@H](CO)NC(=O)[C@H](C(C)C)NC(=O)[C@H](CC(=O)O)NC(=O)[C@H](CO)NC(=O)[C@H]([C@@H](C)O)NC(=O)[C@H](CC5=CC=CC=C5)NC(=O)[C@H]([C@@H](C)O)NC(=O)CNC(=O)[C@H](CCC(=O)O)NC(=O)[C@H](C)NC(=O)[C@H](CC6=CN=CN6)NC(=O)[C@H](CCCNC(=N)N)NC(=O)[C@H](CCC(=O)O)NC(=O)[C@H](CC7=CC=CC=C7)NC(=O)[C@H](CCC(=O)O)NC(=O)[C@H](CC(=O)O)NC(=O)[C@H](CC8=CN=CN8)N

Computed by OEChem 2.3.0 (PubChem release 2021.05.07)

► PubChem

3.2 Molecular Formula



C186H275N51O59

Computed by PubChem 2.1 (PubChem release 2021.05.07)

► PubChem

3.3 Other Identifiers



3.3.1 CAS



87805-34-3

► ChemIDplus; EPA DSSTox

3.3.2 DSSTox Substance ID



DTXSID10236651

► EPA DSSTox

3.4 Synonyms



3.4.1 MeSH Entry Terms



GLP-I (1-37)
glucagon-like peptide 1 (1-37)
glucagon-like peptide I (1-37)
proglucagon (72-108)

► Medical Subject Headings (MeSH)

3.4.2 Depositor-Supplied Synonyms



87805-34-3
Glucagon-like peptide 1 (1-37)
GLP-1 (1-37) (human, bovine, guinea pig, mouse, rat) trifluoroacetate salt
UNII-SQ6SA9L9XQ
SQ6SA9L9XQ
Glp-I (1-37)
Glucagon-related peptide I (ox)
DTXSID10236651
Glucagon-like peptide I (1-37)
GLP-1 (1-37)
Glucagon-like peptide 1 (1-37), human
Preproglucagon (92-128) (human, bovine, guinea pig, mouse, rat)

► PubChem

4 Chemical and Physical Properties

4.1 Computed Properties

Property Name	Property Value	Reference
Molecular Weight	4169	Computed by PubChem 2.1 (PubChem release 2021.05.07)
XLogP3-AA	-17.1	Computed by XLogP3 3.0 (PubChem release 2021.05.07)
Hydrogen Bond Donor Count	63	Computed by Cactvs 3.4.8.18 (PubChem release 2021.05.07)
Hydrogen Bond Acceptor Count	66	Computed by Cactvs 3.4.8.18 (PubChem release 2021.05.07)
Rotatable Bond Count	140	Computed by Cactvs 3.4.8.18 (PubChem release 2021.05.07)
Exact Mass	4168.0119754	Computed by PubChem 2.1 (PubChem release 2021.05.07)
Monoisotopic Mass	4167.0086205	Computed by PubChem 2.1 (PubChem release 2021.05.07)
Topological Polar Surface Area	1790 Å²	Computed by Cactvs 3.4.8.18 (PubChem release 2021.05.07)
Heavy Atom Count	296	Computed by PubChem
Formal Charge	0	Computed by PubChem
Complexity	10100	Computed by Cactvs 3.4.8.18 (PubChem release 2021.05.07)
Isotope Atom Count	0	Computed by PubChem
Defined Atom Stereocenter Count	36	Computed by PubChem
Undefined Atom Stereocenter Count	0	Computed by PubChem
Defined Bond Stereocenter Count	0	Computed by PubChem
Undefined Bond Stereocenter Count	0	Computed by PubChem
Covalently-Bonded Unit Count	1	Computed by PubChem
Compound Is Canonicalized	Yes	Computed by PubChem (release 2021.05.07)

► PubChem

5 Related Records

?

5.1 Related Compounds with Annotation

?

► PubChem

5.2 Related Compounds

?

Same Connectivity	2 Records
Same Parent, Connectivity	3 Records
Same Parent, Exact	2 Records
Mixtures, Components, and Neutralized Forms	1 Record
Similar Compounds	4,513 Records

► PubChem

5.3 Substances

?

5.3.1 Related Substances

?

All	19 Records
Same	17 Records
Mixture	2 Records

► PubChem

5.3.2 Substances by Category

?

► PubChem

6 Chemical Vendors



► PubChem

7 Literature



7.1 NLM Curated PubMed Citations



► PubChem

8 Patents



8.1 Depositor-Supplied Patent Identifiers



► PubChem

[Link to all deposited patent identifiers](#)

► PubChem

9 Biological Test Results



9.1 BioAssay Results



► PubChem

10 Classification



10.1 MeSH Tree



► Medical Subject Headings (MeSH)

10.2 ChemIDplus



► ChemIDplus

10.3 ChEMBL Target Tree



[▶ ChEMBL](#)

10.4 EPA DSSTox Classification

[▶ EPA DSSTox](#)

11 Information Sources



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1. ChemIDplus

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2. EPA DSSTox

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3. PubChem

<https://pubchem.ncbi.nlm.nih.gov>

4. Medical Subject Headings (MeSH)

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