



Sitewide outage warning

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Edotreotide

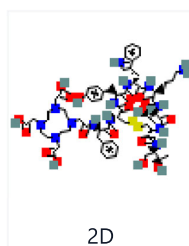
” Cite

Download

PubChem CID

158782

Structure



Molecular Formula

$C_{65}H_{92}N_{14}O_{18}S_2$

Synonyms

Edotreotide
DOTATOC
204318-14-9
SMT-487
SMT 487

[View More...](#)

Molecular Weight

1421.6 g/mol

Computed by PubChem 2.2 (PubChem release 2025.09.15)

Dates

Create: 2005-08-08 Modify: 2026-08-08

Description

Edotreotide is a chelated [octreotide](#) derivative with [somatostatin](#) activity. Edotreotide is produced by substituting [tyrosine](#) for [phenylalanine](#) at the 3 position of [octreotide](#) and chelated via dodecanetetraacetic acid (DOTA). Like [octreotide](#), this edotreotide binds to [somatostatin](#) receptors (SSTRs), especially type 2, present on the cell membrane of many types of neuroendocrine tumors.

When labeled with nuclides, edotreotide conjugates could result in tissue specific cytotoxicity.

► [NCI Thesaurus \(NCIt\)](#)

DOTA - 1,4,7,10-tetraazacyclododecanetetracetic acid; structure given in first source; may be labelled with various radioisotopes

► [Medical Subject Headings \(MeSH\)](#)

Contents

Title and Summary	
1 Structures	▼
2 Names and Identifiers	▼
3 Chemical and Physical Properties	▼
4 Related Records	▼
5 Chemical Vendors	
6 Drug and Medication Information	▼
7 Pharmacology and Biochemistry	▼
8 Associated Disorders and Diseases	
9 Literature	▼
10 Patents	▼
11 Interactions and Pathways	▼
12 Biological Test Results	▼
13 Classification	▼
14 Information Sources	

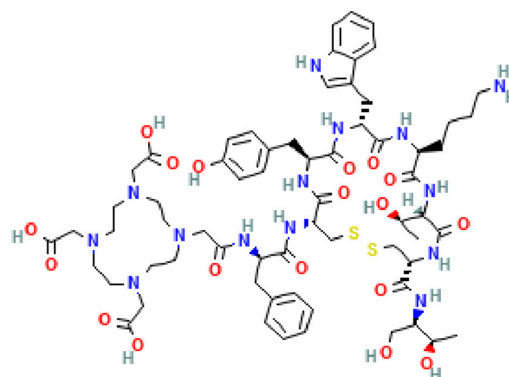
1 Structures



1.1 2D Structure



Chemical Structure Depiction



► PubChem

1.2 3D Status



Conformer generation is disallowed since too many atoms, too flexible

► PubChem

2 Names and Identifiers



2.1 Computed Descriptors



2.1.1 IUPAC Name



2-[4-[2-[[[(2R)-1-[[[(4R,7S,10S,13R,16S,19R)-10-(4-aminobutyl)-4-[[[(2R,3R)-1,3-dihydroxybutan-2-yl]carbamoyl]-7-[(1R)-1-hydroxyethyl]-16-[(4-hydroxyphenyl)methyl]-13-(1H-indol-3-ylmethyl)-6,9,12,15,18-pentaoxo-1,2-dithia-5,8,11,14,17-pentazacycloicos-19-yl]amino]-1-oxo-3-phenylpropan-2-yl]amino]-2-oxoethyl]-7,10-bis(carboxymethyl)-1,4,7,10-tetrazacyclododec-1-yl]acetic acid

Computed by Lexichem TK 2.9.3 (PubChem release 2025.09.15)

► PubChem

2.1.2 InChI



InChI=1S/C65H92N14O18S2/c1-39(81)51(36-80)72-64(96)53-38-99-98-37-52(73-60(92)48(28-41-10-4-3-5-11-41)68-54(84)32-76-20-22-77(33-55(85)86)24-26-79(35-57(89)90)27-25-78(23-21-76)34-56(87)88)63(95)70-49(29-42-15-17-44(83)18-16-42)61(93)71-50(30-43-31-67-46-13-7-6-12-

45(43)46)62(94)69-47(14-8-9-19-66)59(91)75-58(40(2)82)65(97)74-53/h3-7,10-13,15-18,31,39-40,47-53,58,67,80-83H,8-9,14,19-30,32-38,66H2,1-2H3,(H,68,84)(H,69,94)(H,70,95)(H,71,93)(H,72,96)(H,73,92)(H,74,97)(H,75,91)(H,85,86)(H,87,88)(H,89,90)/t39-,40-,47+,48-,49+,50-,51-,52+,53+,58+/m1/s1

Computed by InChI 1.07.4 (PubChem release 2025.09.15)

► [PubChem](#)

2.1.3 InChIKey



RZHKDBRREKOZEW-AAXZNHDCSA-N

Computed by InChI 1.07.4 (PubChem release 2025.09.15)

► [PubChem](#)

2.1.4 SMILES



```
C[C@H]([C@H]1C(=O)N[C@@H](CSSC[C@@H](C(=O)N[C@H](C(=O)N[C@@H](C(=O)N[C@H](C(=O)N1)CCCCN)CC2=CNC3=CC=CC=C32)CC4=CC=C(C=C4)O)NC(=O)[C@@H](CC5=CC=CC=C5)NC(=O)CN6CCN(CCN(CCN(CC6)CC(=O)O)CC(=O)O)CC(=O)O)C(=O)N[C@H](CO)[C@@H](C)O)O
```

Computed by OEChem 4.2.0 (PubChem release 2025.09.15)

► [PubChem](#)

2.2 Molecular Formula



C₆₅H₉₂N₁₄O₁₈S₂

Computed by PubChem 2.2 (PubChem release 2025.09.15)

► [PubChem](#)

2.3 Other Identifiers



2.3.1 CAS



204318-14-9

► [ChemIDplus](#); [DrugBank](#); [EPA DSSTox](#); [FDA Global Substance Registration System \(GSRS\)](#)

2.3.2 UNII



U194AS08HZ

- ▶ FDA Global Substance Registration System (GSRS)

2.3.3 ChEMBL ID



CHEMBL408350

- ▶ ChEMBL; Open Targets

2.3.4 DrugBank ID



DB17969

- ▶ DrugBank

2.3.5 DSSTox Substance ID



DTXSID701021591

- ▶ EPA DSSTox

2.3.6 International Nonproprietary Names (INN)



EDOTREOTIDE

- ▶ European Medicines Agency (EMA); FDA Global Substance Registration System (GSRS)

2.3.7 NCI Thesaurus Code



C2616

- ▶ NCI Thesaurus (NCIt)

2.3.8 Pharos Ligand ID



BRVUJT5TWLM6

- ▶ Pharos

2.3.9 United States Adopted Name (USAN)



► FDA Global Substance Registration System (GSRS)

2.3.10 Wikidata

?

↗

Q908790

► Wikidata

2.3.11 Wikipedia

?

↗

Edotreotide

► Wikipedia

2.4 Synonyms

?

↗

2.4.1 MeSH Entry Terms

?

↗

MeSH Entry Terms for Edotreotide

Edotreotide
DOTATOC
(DOTA(0)-Phe(1)-Tyr(3))octreotide

► Medical Subject Headings (MeSH)

MeSH Entry Terms for SMT 487

SMT 487
SMT-487

► Medical Subject Headings (MeSH)

2.4.2 Depositor-Supplied Synonyms

?

↗

Edotreotide
DOTATOC
204318-14-9



SMT-487
SMT 487
Edotreotida
SMT487
U194AS08HZ
DTXSID701021591
L-CYSTEINAMIDE, N-((4,7,10-TRIS(CARBOXYMETNYL)-1,4,7,10-TETRAAZACYCLODEC-1-YL)ACETYL)-D-PHENYLALAN

► PubChem

3 Chemical and Physical Properties

3.1 Computed Properties

Property Name	Property Value	Reference
Molecular Weight	1421.6 g/mol	Computed by PubChem 2.2 (PubChem release 2025.09.15)
XLogP3-AA	-7.2	Computed by XLogP3 3.0 (PubChem release 2025.09.15)
Hydrogen Bond Donor Count	17	Computed by Cactvs 3.4.8.24 (PubChem release 2025.09.15)
Hydrogen Bond Acceptor Count	25	Computed by Cactvs 3.4.8.24 (PubChem release 2025.09.15)
Rotatable Bond Count	26	Computed by Cactvs 3.4.8.24 (PubChem release 2025.09.15)
Exact Mass	1420.61554449 Da	Computed by PubChem 2.2 (PubChem release 2025.09.15)
Monoisotopic Mass	1420.61554449 Da	Computed by PubChem 2.2 (PubChem release 2025.09.15)
Topological Polar Surface Area	531 Å ²	Computed by Cactvs 3.4.8.24 (PubChem release 2025.09.15)
Heavy Atom Count	99	Computed by PubChem
Formal Charge	0	Computed by PubChem
Complexity	2620	Computed by Cactvs 3.4.8.24 (PubChem release 2025.09.15)
Isotope Atom Count	0	Computed by PubChem

Defined Atom Stereocenter Count	10	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 2025.09.15)

► [PubChem](#)

3.2 Chemical Classes



3.2.1 Drugs



3.2.1.1 Human Drugs



EMA approved medicines: Human medicine (Orphan designations)

► [European Medicines Agency \(EMA\)](#)

4 Related Records



4.1 Related Compounds with Annotation



Follow these links to [do a live 2D search](#) or [do a live 3D search](#) for this compound, sorted by annotation score. This section is deprecated (see [the neighbor discontinuation help page](#) for details), but these live search links provide equivalent functionality to the table that was previously shown here.

► [PubChem](#)

4.2 Related Compounds



Same Connectivity Count	20
Same Parent, Connectivity Count	45
Same Parent, Exact Count	12
Mixtures, Components, and Neutralized Forms Count	11

Similar Compounds (2D)	View in PubChem Search
Similar Conformers (3D)	View in PubChem Search

► [PubChem](#)

4.3 Substances ?

4.3.1 PubChem Reference Collection SID ?

[505586315](#)

► [PubChem](#)

4.3.2 Related Substances ?

All Count	118
Same Count	63
Mixture Count	55

► [PubChem](#)

4.3.3 Substances by Category ?

5 categories	
Chemical Vendors (31)	+
Curation Efforts (10)	+
Governmental Organizations (5)	+
Research and Development (15)	+
Legacy Depositors (13)	+

► [PubChem](#)

4.4 Entrez Crosslinks ?

PubMed Count	1
Taxonomy Count	1
OMIM Count	7
Gene Count	2

► PubChem

4.5 NCBI LinkOut



Provider	Information
Ingenuity Pathways Analysis	Chemical Information: molecular interactions

► NCBI

5 Chemical Vendors



26 vendors	
Molport	
PubChem SID: 464143769	Purchasable Chemical: MolPort-046-936-095
Smolecule	
PubChem SID: 444687123	Purchasable Chemical: S1768149
PubChem SID: 438454755	Purchasable Chemical: S526883
eNovation Chemicals	
PubChem SID: 508700841	Purchasable Chemical: Y3288433
CymitQuimica	
PubChem SID: 470424826	Purchasable Chemical: CQ_173606-11-6
AstaTech, Inc.	
PubChem SID: 500132147	Purchasable Chemical: AT43615
BOC Sciences	
PubChem SID: 441163562	Purchasable Chemical: 204318-14-9
PubChem SID: 488285427	Purchasable Chemical: BAT-010135
AChemBlock	
PubChem SID: 523527706	Purchasable Chemical: X203510
EvitaChem	
PubChem SID: 485738877	Purchasable Chemical: evt-242352

PubChem SID: [485959086](#)

Purchasable Chemical: [evt-267060](#)

Glxxx Labs Inc

PubChem SID: [508629875](#)

Purchasable Chemical: [GLXC-21557](#)

Veeprho

PubChem SID: [513828597](#)

Purchasable Chemical: [VE0021456](#)

RR Scientific

PubChem SID: [481305496](#)

Purchasable Chemical: [R645930](#)

Biorbyt

PubChem SID: [516427990](#)

Purchasable Chemical: [orb1306725](#)

CATO Research Chemicals Inc. (Chemical Vendors, Research and Development)

PubChem SID: [517907527](#)

Purchasable Chemical: [CPTD787232](#)

Finetech Industry Limited

PubChem SID: [405542470](#)

Purchasable Chemical: [FT-0774776](#)

MedChemexpress MCE

PubChem SID: [463557404](#)

Purchasable Chemical: [HY-106033](#)

Biosynth

PubChem SID: [505226172](#)

Purchasable Chemical: [FE175690](#)

InvivoChem

PubChem SID: [503270945](#)

Purchasable Chemical: [V15257](#)

BroadPharm

PubChem SID: [513263078](#)

Purchasable Chemical: [BP-43737](#)

Combi-Blocks

PubChem SID: [482696427](#)

Purchasable Chemical: [JQ-1973](#)

Mcule

PubChem SID: [493275393](#)

Purchasable Chemical: [MCULE-2945057595](#)

PubChem SID: [493514711](#)

Purchasable Chemical: [MCULE-6013845467](#)

BenchChem

PubChem SID: [445932958](#)

Purchasable Chemical: [B1671108](#)

PubChem SID: [445881241](#)

Purchasable Chemical: [B549112](#)

Protheragen

PubChem SID: [505921850](#)

Purchasable Chemical: [PIPB-0186](#)

AbaChemScene

PubChem SID: [463561174](#)

Purchasable Chemical: [CS-0024683](#)

Excenen Pharmatech

PubChem SID: [433969155](#)

Purchasable Chemical: [EX-A4065](#)

Debye Scientific Co., Ltd

PubChem SID: [496734727](#)

Purchasable Chemical: [DA-70511](#)

[► PubChem](#)

6 Drug and Medication Information



6.1 Drug Indication



6 items 		
Search  Sort by MeSH Heading - A to Z 		
MeSH Heading	EFO Term	Max Phase
Carcinoid Tumor	carcinoid tumor	Phase 3
Carcinoid Tumor	digestive system neuroendocrine neoplasm	Phase 3
Meningioma	meningioma	Phase 2
Neuroendocrine Tumors	neuroendocrine neoplasm	Phase 3
Paraganglioma	Paraganglioma	Phase 2
« First < Previous Page 1 of 2 Next > Last »		

[► ChEMBL](#)

6.2 Clinical Trials



6.2.1 ClinicalTrials.gov



7 items 
Search  Sort by Date - Most Recent 
Efficacy and Safety of Radiotherapy Compared to Everolimus in Somatostatin Receptor Positive Neuroendocrine Tumors of the Lung and Thymus. CTID:  NCT05918302 Phase: Phase 3 Status: Recruiting Date: 2026-05-12

Systemic Targeted Adaptive RadioTherapy of NeuroEndocrine Tumors. CTID: ⓘ NCT05387603 Phase: Phase 3 Status: Recruiting Date: 2025-09-10
'Receptor Radionuclide Therapy With 177Lu-DOTATOC CTID: ⓘ NCT06045260 Phase: Phase 2 Status: Recruiting Date: 2024-08-13
Combined Beta- Plus Auger Electron Therapy Using a Novel Somatostatin Receptor Subtype 2 Antagonist Labelled With Terbium-161 (161Tb-DOTA-LM3) CTID: ⓘ NCT05359146 Phase: Early Phase 1 Status: Unknown status Date: 2024-04-19
Phase-II Study of Lu177DOTATOC in Adults With STTR(+)Pulmonary, Pheochromocytoma, Paraganglioma, Unknown Primary, Thymus NETs (PUTNET), or Any Other Non-.GEP-NET. CTID: ⓘ NCT04276597 Phase: Phase 2 Status: Withdrawn Date: 2023-03-10
« First < Previous Page 1 of 2 Next > Last »

► [ClinicalTrials.gov](#)

6.2.2 EU Clinical Trials Register



4 items 
[68Ga] -SomaKIT-TOC PET / CT in postoperative evaluation of meningioma residues in the cranial base area EudraCT: ⓘ 2020-002205-26 Phase: Phase 2 Status: Completed Date: 2020-06-18
Patterns of uptake of 18F-FDG and 68Ga-DOTA PET in advanced neuroendocrine tumors EudraCT: ⓘ 2018-000398-64 Phase: Phase 4 Status: Completed Date: 2018-06-18

Safety and tolerability of 68Ga-DOTATOC for injection in patients with proven gastro-entero-pancreatic neuroendocrine tumors (GEP-NETs).

EudraCT: ⓘ [2014-002741-21](#)

Phase: Phase 2 Status: Completed

Date: 2014-10-23

Dota-Toc-(68Ga) dans les tumeurs endocrines digestives. Intérêt de l'imagerie TEP-TDM.

EudraCT: ⓘ [2007-002610-19](#)

Phase: Phase 3 Status: Ongoing

Date: 2007-07-06

► [EU Clinical Trials Register](#)

6.3 EMA Drug Information



2 items



Category/Dataset: Human medicine (Orphan designations)

Product/no.: [SomaKit TOC \(EMA Product Number: EMEA/H/C/004140\)](#) **Active Substance:** [edotreotide](#)

Status: Authorised

Therapeutic Use: Neuroendocrine Tumors;Radionuclide Imaging

Condition/Indication: This medicinal product is for diagnostic use only. After radiolabelling with gallium (68Ga) chloride solution, the solution of gallium (68Ga) edotreotide obtained is indicated for Positron Emission Tomography (PET) imaging of somatostatin receptor overexpression in adult patients with confirmed or suspected well-differentiated gastro-enteropancreatic neuroendocrine tumours (GEP-NET) for localizing primary tumours and their metastases.

Publish Date: 2016-12-08 **Update Date:** 2026-08-04

Category/Dataset: EMA Article 57

Product/no.: Somakit Toc **Active Substance:** Edotreotide

Status: Product authorisation country: Liechtenstein; Iceland; Norway; European Union

Administration Route: Intravenous Use

► [European Medicines Agency \(EMA\)](#)

6.4 Drug Development Summary



Max Phase

Phase 3

7 Pharmacology and Biochemistry



7.1 MeSH Pharmacological Classification



Radiopharmaceuticals

Compounds that are used in medicine as sources of radiation for radiotherapy and for diagnostic purposes. They have numerous uses in research and industry. (Martindale, The Extra Pharmacopoeia, 30th ed, p1161)

► Medical Subject Headings (MeSH)

8 Associated Disorders and Diseases



8 items

Search

Q

Sort by

Source Disease - A to Z

Source Disease	Evidence ?	Data Source
Carcinoid Tumor		ChEMBL
Carcinoid Tumor		ChEMBL
Edema	PMID:10353735	Comparative Toxicogenomics Database (CTD)
Glioma	PMID:10353735	Comparative Toxicogenomics Database (CTD)
Meningioma		ChEMBL

<< First

< Previous

Page 1

of 2

Next >

Last >>

► Comparative Toxicogenomics Database (CTD); Therapeutic Target Database (TTD)

9 Literature



9.1 Consolidated References



225 items			↓
Search		Q	Sort by Publication Date - Most Recent ▼

Transformation From Atypical to Anaplastic Metastatic Meningioma: Evolutionary Turning Point Marked by Strong 18 F-FDG Avidity and Uptake Collapse From 68 GA-DOTATOC

Publication Name: Clinical Nuclear Medicine

Publication Date: 2023-12-23

PMID: 38141004 DOI: 10.1097/rlu.0000000000004985

Correlation of the apparent diffusion coefficient with the standardized uptake value in meningioma of the skull plane using [68]Ga-DOTATOC PET/MRI

Publication Name: Nuclear Medicine Communications

Publication Date: 2023-10-12

PMID: 37823259 DOI: 10.1097/mnm.0000000000001774

A review of recent advancements in Actinium-225 labeled compounds and biomolecules for therapeutic purposes

Publication Name: Chemical Biology & Drug Design

Publication Date: 2023-09-15

PMID: 37715360 DOI: 10.1111/cbdd.14311

Somatostatin receptor subtype expression and radiomics from DWI-MRI represent SUV of [68Ga]Ga-DOTATOC PET in patients with meningioma

Publication Name: Journal of Neuro-Oncology

Publication Date: 2023-09

PMCID: PMC10589159 PMID: 37707754 DOI: 10.1007/s11060-023-04414-3

Cervical Ganglioneuroblastoma Diagnosed by 68Ga-DOTATOC PET/CT in a Child with Opsoclonus Myoclonus Syndrome

Publication Name: Journal of Nuclear Medicine Technology

Publication Date: 2023-08-16

PMID: 37586852 DOI: 10.2967/jnmt.123.265776

« First < Previous Page 1 of 45 Next > Last »

► PubChem

9.2 NLM Curated PubMed Citations



All NLM Curated PubMed Citations

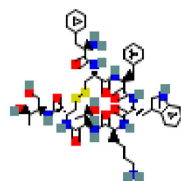


► Medical Subject Headings (MeSH)

Showing 3 of 25 [View More](#)

Chemical

Selected evidence



Octreotide

CID 448601

598 articles

[View All](#)

Evaluation of (64)Cu-labeled DOTA-D-Phe(1)-Tyr (3)-octreotide ((64)Cu-DOTA-TOC) for imaging somatostatin receptor-expressing tumors

PMID 19504168; DOI 10.1007/s12149-009-0274-0; Annals of Nuclear Medicine 2009-06-06

Name matches: **octreotide** *dota-toc*

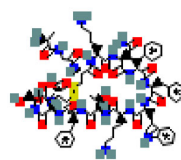
Searching for primaries in patients with neuroendocrine tumors (NET) of unknown primary and clinically suspected NET: Evaluation of Ga-68 DOTATOC PET/CT and In-111 DTPA octreotide SPECT/CT

PMID 25435846; DOI 10.2478/raon-2014-0018; Radiology and Oncology 2014-11-05

Name matches: **octreotide** *dotatoc*

Comparison of [111In]octreotide scintigraphy and [68Ga]DOTATOC PET in GEP-NETs: concordance of Krenning scores and implications for PRRT treatment eligibility

PMID 42284283; DOI 10.1159/000552968; Neuroendocrinology 2026-06-12

Name matches: **octreotide** *dotatoc*

Somatostatin

CID 16129706

523 articles

[View All](#)

Targeted radiotherapy for small cell lung cancer using 90Yttrium-DOTATOC, an Yttrium-labelled somatostatin analogue: a pilot trial

PMID 15301877; DOI 10.1016/j.lungcan.2004.02.020; Lung cancer (Amsterdam, Netherlands) 2004-09-01

Name matches: **somatostatin** *dotatoc*

Dosing 225Ac-DOTATOC in patients with somatostatin-receptor-positive solid tumors: 5-year follow-up of hematological and renal toxicity

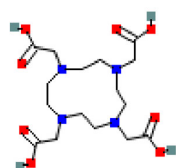
PMID 34448031; DOI 10.1007/s00259-021-05474-1; European Journal of Nuclear Medicine and Molecular Imaging 2021-08-26

Name matches: **somatostatin** *dotatoc*

Comparison of radiolabeled somatostatin analogs (DOTATATE, DOTANOC, and DOTATOC) in somatostatin receptor (SSTR) imaging for gastroenteropancreatic neuroendocrine neoplasms (GEP-NENs): a narrative literature review

PMID 40580373; DOI 10.1007/s12149-025-02072-1; Annals of Nuclear Medicine 2025-06-28 (Review Article)

Name matches: **somatostatin** *dotatoc*



Dota

CID 121841

239 articles

[View All](#)

Intraindividual comparison of [177Lu]Lu-DOTA-EB-TATE and [177Lu]Lu-DOTA-TOC

PMID 33452632; DOI 10.1007/s00259-020-05177-z; European Journal of Nuclear Medicine and Molecular Imaging 2021-01-15

Name matches: **dota** *dota-toc*

Targeted β^- -Particle Plus Conversion and Auger-Electron Therapy with 161Tb-Labeled Somatostatin Receptor Antagonist DOTA-LM3: A Phase 0 Study

PMID 41381241; DOI 10.2967/jnumed.125.270654; Journal of nuclear medicine : official publication, Society of Nuclear Medicine 2025-12-11

Name matches: **dota** *dotatoc*

NMR Studies Reveal Structural Differences between the Gallium and Yttrium Complexes of DOTA-d-Phe-Tyr3-octreotide

PMID 15743193; DOI 10.1021/jm0496335; Journal of Medicinal Chemistry 2005-02-10

Name matches: **1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetic acid**; **dota** *dotatoc*

► PubChem

9.4 Chemical-Gene Co-Occurrences in Literature



Showing 3 of 25 View More		
Gene/Protein/Enzyme	Selected evidence	
somatostatin	251 articles	View All
	Targeted radiotherapy for small cell lung cancer using 90Yttrium-DOTATOC, an Yttrium-labelled somatostatin analogue: a pilot trial	
	PMID 15301877; DOI 10.1016/j.lungcan.2004.02.020; Lung cancer (Amsterdam, Netherlands) 2004-09-01	
	Dosing 225Ac-DOTATOC in patients with somatostatin-receptor-positive solid tumors: 5-year follow-up of hematological and renal toxicity	
	PMID 34448031; DOI 10.1007/s00259-021-05474-1; European Journal of Nuclear Medicine and Molecular Imaging 2021-08-26	
	Comparison of radiolabeled somatostatin analogs (DOTATATE, DOTANOC, and DOTATOC) in somatostatin receptor (SSTR) imaging for gastroenteropancreatic neuroendocrine neoplasms (GEP-NENs): a narrative literature review	
	PMID 40580373; DOI 10.1007/s12149-025-02072-1; Annals of Nuclear Medicine 2025-06-28 (Review Article)	

single-strand-selective monofunctional uracil-dna glycosylase 1	123 articles	View All 
	Functional imaging in differentiating bronchial masses: an initial experience with a combination of (18)F-FDG PET-CT scan and (68)Ga DOTA-TOC PET-CT scan PMID 19784877; DOI 10.1007/s12149-009-0302-0; Annals of Nuclear Medicine 2009-09-29	
	Radiation exposure to nuclear medicine technologists performing a V/Q PET: Comparison with conventional V/Q scintigraphy, [18F]FDG PET and [68Ga]Ga DOTATOC PET procedures PMID 36530884; DOI 10.3389/fmed.2022.1051249; Frontiers in Medicine 2022-11-30	
	Dual PET Imaging with [68Ga]Ga-DOTA-TOC and [18F]FDG to Localize Neuroendocrine Tumors of Unknown Origin PMID 41002566; DOI 10.3390/curroncol32090497; Current oncology (Toronto, Ont.) 2025-09-05	
somatostatin receptor 2	49 articles	View All 
	Quantitative assessment of SSTR2 expression in patients with non-small cell lung cancer using(68)Ga-DOTATOC PET and comparison with (18)F-FDG PET PMID 16570185; DOI 10.1007/s00259-005-0063-5; European Journal of Nuclear Medicine and Molecular Imaging 2006-03-29 Name matches: <i>sstr2 dotatoc</i>	
	Correlation of immunohistopathological expression of somatostatin receptor-2 in breast cancer and tumor detection with 68Ga-DOTATOC and 18F-FDG PET imaging in an animal model PMID 23898054; Anticancer research 2013-08-01 Name matches: <i>sstr2 dotatoc</i>	
	(68)Ga-DOTATOC PET and gene expression profile in patients with neuroendocrine carcinomas: strong correlation between PET tracer uptake and gene expression of somatostatin receptor subtype 2 PMID 27069766; American journal of nuclear medicine and molecular imaging 2016-01-01 Name matches: <i>sstr2 dotatoc</i>	

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9.5 Chemical-Disease Co-Occurrences in Literature



Showing 3 of 25 View More 		
Disease	Selected evidence	
Neuroendocrine Tumors	475 articles	View All 

Systematic review and meta-analysis of the efficacy and safety of [177 Lu]Lu-dotreotide ([177 Lu]Lu- DOTATOC) for the treatment of neuroendocrine tumors

PMID 41204752; DOI 10.1111/jne.70103; Journal of Neuroendocrinology 2025-11-08 (Review Article)

Name matches: **nets**; **neuroendocrine tumors** *dotatoc*; *edotreotide*

Peptide receptor radionuclide therapy of neuroendocrine tumors with (90)Y-DOTATOC: is treatment response predictable by pre-therapeutic uptake of (68)Ga-DOTATOC?

PMID 24034971; DOI 10.1016/j.diii.2013.07.006; Diagnostic and Interventional Imaging 2014-03-01

Name matches: **net**; **neuroendocrine tumors** *dotatoc*

68Ga-DOTA-TOC-PET/CT detects heart metastases from ileal neuroendocrine tumors

PMID 24272595; DOI 10.1007/s12020-013-0108-7; Endocrine 2013-11-23

Name matches: **nets**; **neuroendocrine tumors** *dota-toc*

Neoplasms

604 articles

View All 

Yttrium-90 DOTATOC therapy in GEP-NET and other SST2 expressing tumors: a selected review

PMID 21107762; DOI 10.1007/s12149-010-0444-0; Annals of Nuclear Medicine 2010-11-25 (Review Article)

Name matches: **tumor**; **tumors** *dotatoc*

Evaluation of (64)Cu-labeled DOTA-D-Phe(1)-Tyr (3)-octreotide ((64)Cu-DOTA-TOC) for imaging somatostatin receptor-expressing tumors

PMID 19504168; DOI 10.1007/s12149-009-0274-0; Annals of Nuclear Medicine 2009-06-06

Name matches: **tumor**; **tumors** *dota-toc*

Preliminary data on biodistribution and dosimetry for therapy planning of somatostatin receptor positive tumours: comparison of (86)Y-DOTATOC and (111)In-DTPA-octreotide

PMID 11734910; DOI 10.1007/s002590100628; European Journal of Nuclear Medicine and Molecular Imaging 2001-10-20

Name matches: **tumour**; **tumours** *dotatoc*

Neoplasm Metastasis

309 articles

View All 

68Ga-DOTA-TOC-PET/CT detects heart metastases from ileal neuroendocrine tumors

PMID 24272595; DOI 10.1007/s12020-013-0108-7; Endocrine 2013-11-23

Name matches: **metastases**; **metastatic** *dota-toc*

Multidisciplinary approach including receptor radionuclide therapy with 90Y-DOTATOC ([90Y-DOTA0, Tyr3]-octreotide) and 177Lu-DOTATATE ([177Lu-DOTA0, Tyr3]-octreotate) in ectopic cushing syndrome from a metastatic gastrinoma: a promising proposal

PMID 18308661; DOI 10.4158/ep.14.2.213; Endocrine practice : official journal of the American College of Endocrinology and the American Association of Clinical Endocrinologists 2008-03-

01

Name matches: **metastatic** *dotatoc***A comparison of (111)In-DOTATOC and (111)In-DOTATATE: biodistribution and dosimetry in the same patients with metastatic neuroendocrine tumours**

PMID 15197500; DOI 10.1007/s00259-004-1553-6; European Journal of Nuclear Medicine and Molecular Imaging 2004-06-10

Name matches: **metastatic** *dotatoc*[► PubChem](#)

9.6 Chemical-Organism Co-Occurrences in Literature



Showing 3 of 25 View More		
Organism	Selected evidence	
homo sapiens (human)	71 articles	View All
	Locoregional regulatory peptide receptor targeting with the diffusible somatostatin analogue 90Y-labeled DOTA0-D-Phe1-Tyr3-octreotide (DOTATOC): a pilot study in human gliomas	
	PMID 10353735; Clinical cancer research : an official journal of the American Association for Cancer Research 1999-05-01 Name matches: human <i>dotatoc</i>	
	Clinical evaluation of the radiolanthanide terbium-152: first-in-human PET/CT with 152Tb-DOTATOC	
	PMID 28825750; DOI 10.1039/c7dt01936j; Dalton transactions (Cambridge, England : 2003) 2017-10-31 Name matches: human <i>dotatoc</i>	
	DOTATOC PET/CT imaging of a typical carcinoid tumor in a human ex-vivo perfused lung lobe	
	PMID 37456303; DOI 10.21037/qims-22-1188; Quantitative Imaging in Medicine and Surgery 2023-07-01 Name matches: human <i>dotatoc</i> ; <i>edotreotide</i>	
mus sp. (mice)	35 articles	View All
	Survival impact of [225Ac]Ac-DOTATOC alpha-therapy in a preclinical model of pancreatic neuroendocrine tumor liver micrometastases	
	PMID 39269657; DOI 10.1007/s00259-024-06918-0; European Journal of Nuclear Medicine and Molecular Imaging 2024-09-13 Name matches: mice <i>dotatoc</i>	
	Evaluation of (64)Cu-labeled DOTA-D-Phe(1)-Tyr (3)-octreotide ((64)Cu-DOTA-TOC) for imaging somatostatin receptor-expressing tumors	
	PMID 19504168; DOI 10.1007/s12149-009-0274-0; Annals of Nuclear Medicine 2009-06-06 Name matches: mice <i>dota-toc</i>	

Combining [177Lu]Lu-DOTA-TOC PRRT with PARP inhibitors to enhance treatment efficacy in small cell lung cancer

PMID 39023784; DOI 10.1007/s00259-024-06844-1; European Journal of Nuclear Medicine and Molecular Imaging 2024-07-18
Name matches: mice dota-toc

glomus

8 articles

View All

A Case of Glomus Tumor Mimicking Neuroendocrine Tumor on 68 Ga-DOTATOC PET/CT

PMID 34868381; DOI 10.1007/s13139-021-00717-3; Nuclear Medicine and Molecular Imaging 2021-10-13
Name matches: glomus dotatoc

68 Ga-DOTATOC PET/CT of Glomus Tumor of the Small Bowel

PMID 39999287; DOI 10.1097/rlu.0000000000005714; Clinical Nuclear Medicine 2025-02-25
Name matches: glomus dotatoc

Peptide receptor radionuclide therapy with (90)Y/ (177)Lu-labelled peptides for inoperable head and neck paragangliomas (glomus tumours)

PMID 25822655; DOI 10.1007/s00259-015-3029-2; European Journal of Nuclear Medicine and Molecular Imaging 2015-03-31
Name matches: glomus dotatoc

PubChem

10 Patents



10.1 Depositor-Supplied Patent Identifiers



2,847 items	Download
Search	Sort by Priority Date - Most Recent
Double-target targeted polypeptide compound, preparation method and application	
Publication Number: CN-119912519-A	
Priority Date: 2024-12-11	
PDL1 targeting polypeptide, molecular imaging probe and application thereof	
Publication Number: CN-119431504-A	
Priority Date: 2024-11-08	

PDL1 targeting polypeptide, molecular imaging probe and application thereof

Publication Number: ⓘ CN-119431504-B

Priority Date: ⓘ 2024-11-08 Grant Date: 2025-06-17

Porous ion imprinting imine adsorption material for purifying nuclear medical waste liquid and preparation method thereof

Publication Number: ⓘ CN-119192505-A

Priority Date: ⓘ 2024-10-17

Porous ion imprinting imine adsorption material for purifying nuclear medical waste liquid and preparation method thereof

Publication Number: ⓘ CN-119192505-B

Priority Date: ⓘ 2024-10-17 Grant Date: 2025-05-16

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10.2 WIPO PATENTSCOPE



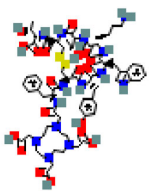
Patents are available for this chemical structure:

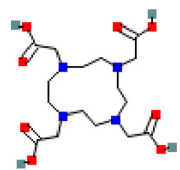
<https://patentscope.wipo.int/search/en/result.jsf?inchikey=RZHKDBRREKOZEW-AAXZNHDCSA-N>

► PATENTSCOPE (WIPO)

10.3 Chemical Co-Occurrences in Patents



Showing 3 of 100 View More 			
Chemical	Selected evidence		
 Dotatate CID 11170867	62 patents from 38 patent families View All 		
	Stable, concentrated radionuclide complex solutions US-12144873-B2; Grant Date: 2024-11-19		
	Kit and method for producing a radiopharmaceutical US-9421283-B2; Grant Date: 2016-08-23		
	Stable, concentrated radionuclide complex solutions		

 Lutetium Lu-177 CID 161046	44 patents from 32 patent families View All Radiopharmaceuticals at different activity reference times US-12491273-B2; Grant Date: 2025-12-09 Stable, concentrated radionuclide complex solutions US-10596278-B2; Grant Date: 2020-03-24 Stable concentrated radionuclide complex solution JP-7358451-B2; Grant Date: 2023-10-10
 Dota CID 121841	85 patents from 58 patent families View All Stable, concentrated radionuclide complex solutions US-12144873-B2; Grant Date: 2024-11-19 Stable, concentrated radionuclide complex solutions US-10596278-B2; Grant Date: 2020-03-24 Method and kit for preparing a radiopharmaceutical US-9161998-B2; Grant Date: 2015-10-20

► PubChem

10.4 Chemical-Disease Co-Occurrences in Patents



Showing 3 of 100 View More		↓
Disease	Selected evidence	
Neuroendocrine Tumors	33 patents from 21 patent families View All Stabilized compositions of radionuclides and uses thereof US-11707540-B2; Grant Date: 2023-07-25 Stable, concentrated radionuclide complex solutions US-12151003-B2; Grant Date: 2024-11-26 Kit and method for producing a radiopharmaceutical US-9421283-B2; Grant Date: 2016-08-23	
Neoplasms	68 patents from 38 patent families View All Stabilized compositions of radionuclides and uses thereof US-11707540-B2; Grant Date: 2023-07-25	

Stable, concentrated radionuclide complex solutions

US-12151003-B2; Grant Date: 2024-11-26

Combination of para-aminohippuric acid (PAH) and radiolabeled conjugates for treating cancer - Patent Application 20070233633

JP-7531707-B2; Grant Date: 2024-08-09

Thyroid cancer, medullary

10 patents from 6 patent families

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Stable, concentrated radionuclide complex solutions

US-12151003-B2; Grant Date: 2024-11-26

Combination of para-aminohippuric acid (PAH) and radiolabeled conjugates for treating cancer - Patent Application 20070233633

JP-7531707-B2; Grant Date: 2024-08-09

Stable, concentrated radionuclide complex solutions

US-10596278-B2; Grant Date: 2020-03-24

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10.5 Chemical-Gene Co-Occurrences in Patents



Showing 3 of 100 [View More](#)



Gene

Selected evidence

[sstr2](#)

14 patents from 8 patent families

[View All](#)

Transduced T cells expressing human SSTR2 and application thereof

US-11634471-B2; Grant Date: 2023-04-25

Stabilized compositions of radionuclides and uses thereof

US-11707540-B2; Grant Date: 2023-07-25

Combination of para-aminohippuric acid (PAH) and radiolabeled conjugates for treating cancer - Patent Application 20070233633

JP-7531707-B2; Grant Date: 2024-08-09

[sst](#)

24 patents from 15 patent families

[View All](#)

Somatostatin analogues

EP-1598366-B1; Grant Date: 2008-08-20

Transduced T cells expressing human SSTR2 and application thereof

US-11634471-B2; Grant Date: 2023-04-25

Stabilized compositions of radionuclides and uses thereof

pdpk1

6 patents from 3 patent families

[View All](#) 

Stable, concentrated radionuclide complex solutions

US-12151003-B2; Grant Date: 2024-11-26

Stable, concentrated radionuclide complex solutions

US-10596278-B2; Grant Date: 2020-03-24

Stable, concentrated radionuclide complex solutions

US-11904027-B2; Grant Date: 2024-02-20

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10.6 Chemical-Organism Co-Occurrences in Patents

Showing 3 of 100 [View More](#) 

Organism

Selected evidence

mycobacterium tuberculosis
variant bovis bcg

6 patents from 3 patent families

[View All](#)

Stable, concentrated radionuclide complex solutions

US-12144873-B2; Grant Date: 2024-11-19

Stable, concentrated radionuclide complex solutions

US-10596278-B2; Grant Date: 2020-03-24

Stable, concentrated radionuclide complex solutions

US-11904027-B2; Grant Date: 2024-02-20

erwinia

6 patents from 3 patent families

[View All](#) 

Stable, concentrated radionuclide complex solutions

US-12144873-B2; Grant Date: 2024-11-19

Stable, concentrated radionuclide complex solutions

US-10596278-B2; Grant Date: 2020-03-24

Stable, concentrated radionuclide complex solutions

US-11904027-B2; Grant Date: 2024-02-20

prochelator

3 patents from 3 patent families

[View All](#) 

Prochelators of radiometal labeled molecules

EP-1289571-B1; Grant Date: 2004-07-21

Chelating agent

JP-5705434-B2; Grant Date: 2015-04-22

Radiolabeled conjugates based on substance p and the uses thereof

EP-1603598-B1; Grant Date: 2008-10-08

► PubChem

11 Interactions and Pathways



11.1 Chemical-Target Interactions



► Comparative Toxicogenomics Database (CTD); Drug Gene Interaction database (DGIdb)

12 Biological Test Results



12.1 BioAssay Results



► PubChem

13 Classification



13.1 MeSH Tree



► Medical Subject Headings (MeSH)

13.2 NCI Thesaurus Tree



13.3 ChemIDplus



13.4 ChEMBL Target Tree



13.5 NORMAN Suspect List Exchange Classification





► NORMAN Suspect List Exchange

13.6 EPA DSSTox Classification



► EPA DSSTox

13.7 MolGenie Organic Chemistry Ontology



13.8 Chemicals in PubChem from Regulatory Sources



14 Information Sources



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EDOTREOTIDE

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EDOTREOTIDE

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Edotreotide [USAN:INN]

<https://pubchem.ncbi.nlm.nih.gov/substance/?source=chemidplus&sourceid=0204318149>

ChemIDplus Chemical Information Classification

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

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Edotreotide

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Edotreotide

<https://comptox.epa.gov/dashboard/DTXSID701021591>

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EDOTREOTIDE

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Edotreotide

<https://ctdbase.org/detail.go?type=chem&acc=C106246>

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<http://www.dgldb.org/downloads>

EDOTREOTIDE

<https://www.dgldb.org/drugs/iuphar.ligand:5638>

10. Therapeutic Target Database (TTD)

Edotreotide

<https://ttd.idrblab.cn/data/drug/details/D0J8PI>

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SMT 487

<https://id.nlm.nih.gov/mesh/M0276921.html>

MeSH Tree

<https://www.nlm.nih.gov/mesh/meshhome.html>

Radiopharmaceuticals

<https://id.nlm.nih.gov/mesh/M0028704.html>

18. PubChem

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Chemicals in PubChem from Regulatory Sources

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NORMAN Suspect List Exchange Classification

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MolGenie Organic Chemistry Ontology

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