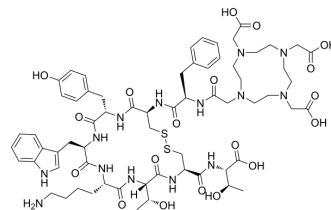


## DOTATATE

<b>Cat. No.:</b>	HY-106244
<b>CAS No.:</b>	177943-88-3
<b>Molecular Formula:</b>	C <sub>65</sub> H <sub>90</sub> N <sub>14</sub> O <sub>19</sub> S <sub>2</sub>
<b>Molecular Weight:</b>	1435.62
<b>Sequence Shortening:</b>	{DOTA}-{d-Phe}-CY-{d-Trp}-KTCT (Disulfide bridge:Cys2-Cys7)
<b>Target:</b>	Others
<b>Pathway:</b>	Others
<b>Storage:</b>	Sealed storage, away from moisture and light
	Powder    -80°C    2 years
	-20°C    1 year



\* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)

### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (69.66 mM; Need ultrasonic)

Concentration	Solvent	Mass	1 mg	5 mg	10 mg
			1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		0.6966 mL	3.4828 mL	6.9656 mL
	5 mM		0.1393 mL	0.6966 mL	1.3931 mL
	10 mM		0.0697 mL	0.3483 mL	0.6966 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

DOTATATE is a DOTA-conjugated peptide. DOTATATE can be labelled with radionuclides for positron emission tomography (PET) imaging and peptide receptor radionuclide research (PRRT)<sup>[1][2][3][4]</sup>.

#### In Vivo

<sup>177</sup>Lu-DOTATATE shows excellent antitumor effects in rats<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Jong M, et, al. Combination radionuclide therapy using <sup>177</sup>Lu- and <sup>90</sup>Y-labeled somatostatin analogs. J Nucl Med. 2005 Jan;46 Suppl 1:13S-7S.
- [2]. Gains JE, et, al. <sup>68</sup>Ga-DOTATATE and <sup>123</sup>I-mIBG as imaging biomarkers of disease localisation in metastatic neuroblastoma: implications for molecular radiotherapy. Nucl Med Commun. 2020 Aug 10.

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[3]. Breeman WAP, et, al. Optimising conditions for radiolabelling of DOTA-peptides with  $^{90}\text{Y}$ ,  $^{111}\text{In}$  and  $^{177}\text{Lu}$  at high specific activities. Eur J Nucl Med Mol Imaging. 2003 Jun;30(6):917-20.

[4]. Reubi JC, et, al. Affinity profiles for human somatostatin receptor subtypes SST1-SST5 of somatostatin radiotracers selected for scintigraphic and radiotherapeutic use. Eur J Nucl Med. 2000 Mar;27(3):273-82.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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