

PRODUCT INFORMATION



IRL 1620 (trifluoroacetate salt)

Item No. 30980

Formal Name: N-(3-carboxy-1-oxopropyl)-L- α -aspartyl-L- α -glutamyl-L- α -glutamyl-L-alanyl-L-valyl-L-tyrosyl-L-phenylalanyl-L-alanyl-L-histidyl-L-leucyl-L- α -aspartyl-L-isoleucyl-L-isoleucyl-L-tryptophan, trifluoroacetate salt

Synonyms: PMZ-1620, SPI 1620, Suc-[Glu⁹, Ala^{11,15}]-ET-1(8-21)

MF: C₈₆H₁₁₇N₁₇O₂₇ • XCF₃COOH

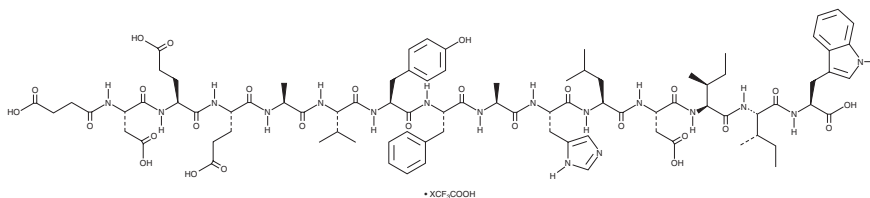
FW: 1,820.9

Purity: ≥98%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

IRL 1620 (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the IRL 1620 (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

IRL 1620 is a peptide endothelin type B (ET_B) receptor agonist.¹ It selectively binds to ET_B receptors (K_i = 16 pM) over ET_A receptors (IC₅₀ = 1.9 μ M) and induces contraction of isolated guinea pig trachea when used at concentrations ranging from 0.01 to 1 μ M. IRL 1620 (1 nmol/kg) reduces mean arterial pressure (MAP) in normotensive rats and spontaneously hypertensive rats (SHRs) and diminishes the transient depressor response in SHRs.² It reduces infarct volume and improves motor and neurological function in a rat model of cerebral ischemia.³ IRL 1620 also improves spatial memory deficits induced by amyloid- β (A β) in a rat model of Alzheimer's disease.

References

1. Takai, M., Umemura, I., Yamasaki, K., *et al.* A potent and specific agonist, Suc-[Glu⁹,Ala^{11,15}]-endothelin-1(8-21), IRL 1620, for the ET_B receptor. *Biochem. Biophys. Res. Commun.* **184**(2), 953-959 (1992).
2. James, A.F., Urade, Y., Webb, R.L., *et al.* IRL 1620, succinyl-[Glu⁹,Ala^{11,15}]-endothelin-1(8-21), a highly specific agonist of the ET_B receptor. *Cardiovasc. Drug Rev.* **11**(3), 253-270 (1993).
3. Gulati, A., Hornick, M.G., Briyal, S., *et al.* A novel neuroregenerative approach using ET_B receptor agonist, IRL-1620, to treat CNS disorders. *Physiol. Res.* **67**(Suppl 1), S95-S113 (2018).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/03/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM