

PRODUCT INFORMATION



Cypridina Luciferin (trifluoroacetate salt)

Item No. 41088

Formal Name: 1-(3-(2-(sec-butyl)-6-(1H-indol-3-yl)-3-oxo-3,7-dihydroimidazo[1,2-a]pyrazin-8-yl)propyl)guanidine, trifluoroacetate salt

Synonyms: Vargulin, Vargulin Luciferin

MF: C₂₂H₂₇N₇O • XCF₃COOH

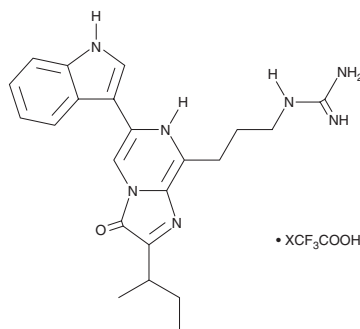
FW: 405.5

Purity: ≥95%

Supplied as: A 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

Cypridina luciferin (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the cypridina luciferin (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Cypridina luciferin (trifluoroacetate salt) is soluble in DMSO.

Description

Cypridina luciferin is a chemiluminescent substrate for luciferase.¹ Upon hydrolysis by luciferase, it displays a luminescence maximum of 465 nm. Cypridina luciferin has been used in estrogen receptor α (ER α) reporter assays for the discovery of ER α -activating compounds *in vitro* and in bioluminescence resonance energy transfer (BRET) assays for tumor detection *in vivo*.^{2,3}

References

1. Shimomura, O., Johnson, F.H., and Masugi, T. Cypridina bioluminescence: Light-emitting oxyluciferin-luciferase complex. *Science* **164**(3885), 1299-1300 (1969).
2. Tochigi, Y., Sato, N., Sahara, T., *et al.* Sensitive and convenient yeast reporter assay for high-throughput analysis by using a secretory luciferase from *Cypridina noctiluca*. *Anal. Chem.* **82**(13), 5768-5876 (2010).
3. Wu, C., Mino, K., Akimoto, H., *et al.* In vivo far-red luminescence imaging of a biomarker based on BRET from *Cypridina* bioluminescence to an organic dye. *Proc. Natl. Acad. Sci. USA* **106**(37), 15599-15603 (2009).

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.

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