

PRODUCT INFORMATION



Eltrombopag-¹³C₄ Item No. 26114

Formal Name: (Z)-3'-(2-(1-(3,4-dimethylphenyl)-3-(methyl-¹³C)-5-oxo-1,5-dihydro-4H-pyrazol-4-ylidene-3,4,5-¹³C₃)hydrazineyl)-2'-hydroxy-[1,1'-biphenyl]-3-carboxylic acid

MF: C₂₁[¹³C]₄H₂₂N₄O₄

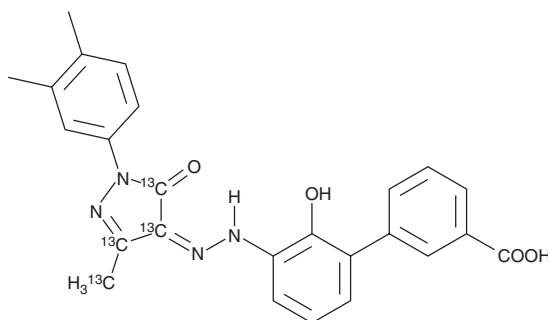
FW: 446.4

Purity: ≥98%

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

Eltrombopag-¹³C₄ is supplied as a solid. A stock solution may be made by dissolving the eltrombopag-¹³C₄ in the solvent of choice, which should be purged with an inert gas. Eltrombopag-¹³C₄ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of eltrombopag-¹³C₄ in these solvents is approximately 0.11, 0.5, and 1 mg/ml, respectively.

Eltrombopag-¹³C₄ is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Eltrombopag-¹³C₄ is intended for use as an internal standard for the quantification of eltrombopag (Item No. 13247) by GC- or LC-MS. Eltrombopag is an orally bioavailable nonpeptide agonist of the thrombopoietin receptor (EC₅₀ = 0.27 μM in a reporter assay) and an iron chelator.¹ It increases STAT5 phosphorylation in N2C-Tpo cells when used at a concentration of 30 μM and p42/44 MAPK phosphorylation when used at 10 μM. Eltrombopag binds to the transmembrane domain of the thrombopoietin receptor and stimulates megakaryocytopoiesis in human primary bone marrow cells. It increases platelet production in chimpanzees when administered at a dose of 10 mg/kg per day for five days. Eltrombopag also binds to iron (III) and mobilizes cellular iron and ferritin in H9C2, Huh7, and RINm5F cells in a concentration-dependent manner.² It enhances cellular iron mobilization when used in combination with the iron chelators deferasirox (Item No. 16753) and CP40.

References

1. Erickson-Miller, C.L., Delorme, E., Tian, S.S., *et al.* Preclinical activity of eltrombopag (SB-497115), an oral, non-peptide thrombopoietin receptor agonist. *Stem Cells* **27**(2), 424-430 (2008).
2. Vlachodimitropoulou, E., Chen, Y.L., Garbowski, M., *et al.* Eltrombopag: A powerful chelator of cellular or extracellular iron(III) alone or combined with a second chelator. *Blood* **130**(17), 1923-1933 (2017).

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, 12/20/2022

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