

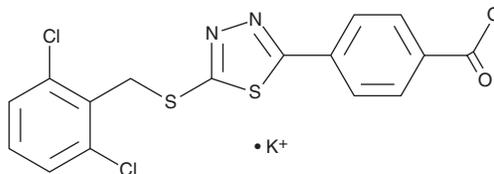
PRODUCT INFORMATION



Yoda2 (potassium salt)

Item No. 43639

Formal Name: 4-(5-((2,6-dichlorobenzyl)thio)-1,3,4-thiadiazol-2-yl)benzoate, monopotassium salt
Synonym: KC289
MF: C₁₆H₉Cl₂N₂O₂S₂ • K
FW: 435.4
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

Yoda2 (potassium salt) is supplied as a solid. A stock solution may be made by dissolving the yoda2 (potassium salt) in the solvent of choice, which should be purged with an inert gas. Yoda2 (potassium salt) is slightly soluble (0.1-1 mg/ml) in DMSO.

Yoda2 (potassium salt) is slightly 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

Yoda2 is an agonist of Piezo1.¹ It induces calcium influx in HEK cells overexpressing mouse Piezo1 (EC₅₀ = 150 nM). Yoda2 is selective for Piezo1 over 30 other ion channels and receptors at 5 μM. It induces smooth muscle relaxation in isolated and perfused mouse portal veins (EC₅₀ = 1.2 μM). Yoda2 (5 μmol/kg) increases cortical area and thickness at 15 and 37% of the tibial bone length in combination with loading in 22-month-old female mice in a model of aging-induced loss of bone adaptation.²

References

1. Parsonage, G., Cuthbertson, K., Endesh, N., *et al.* Improved PIEZO1 agonism through 4-benzoic acid modification of Yoda1. *Br. J. Pharmacol.* **180(16)**, 2039-2063 (2023).
2. Meslier, Q.A., Oehrlein, R., and Shefelbine, S.J. Combined effects of mechanical loading and piezo1 chemical activation on 22-months-old female mouse bone adaptation. *Aging Cell* (2025).

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, 06/09/2025

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