PRODUCT INFORMATION



AC-55541

Item No. 17736

CAS Registry No.: 916170-19-9

Formal Name: α-(benzoylamino)-3,4-dihydro-

> 4-oxo-1-phthalazineacetic acid 2E-[1-(3-bromophenyl)ethylidene]

hydrazide

MF: $C_{25}H_{20}BrN_5O_3$

FW: 518.4 **Purity:** ≥98%

λ_{max}: 255, 279 nm UV/Vis.: Supplied as:

-20°C Storage: Stability:

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

A crystalline solid ≥4 years

Laboratory Procedures

AC-55541 is supplied as a crystalline solid. A stock solution may be made by dissolving the AC-55541 in the solvent of choice, which should be purged with an inert gas. AC-55541 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of AC-55541 in these solvents is approximately 10 and 15 mg/ml, respectively.

AC-55541 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AC-55541 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. AC-55541 has a solubility of approximately 0.11 mg/ml in a 1:8 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

AC-55541 is a proteinase-activated receptor 2 (PAR2) agonist that displays no activity at other PAR subtypes or at over 30 other receptors involved in nociception and inflammation. It stimulates cell proliferation, phosphatidylinositol hydrolysis, and calcium mobilization in in vitro functional assays (pEC₅₀s = 6.7, 5.9, and 6.6, respectively). Intrapaw administration of 3-10 mg/kg AC-55541 elicited pronociceptive activity in vivo.1

Reference

1. Gardell, L.R., Ma, J.-N., Seitzberg, J.G., et al. Identification and characterization of novel small-molecule protease-activated receptor 2 agonists. J. Pharmacol. Exp. Ther. 327(3), 799-808 (2008).

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

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

uyer 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, 11/07/2022

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