

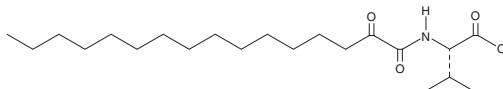
# PRODUCT INFORMATION



## GK241

Item No. 37689

CAS Registry No.: 1899930-93-8  
Formal Name: N-(1,2-dioxohexadecyl)-L-valine  
MF:  $C_{21}H_{39}NO_4$   
FW: 369.5  
Purity:  $\geq 98\%$   
UV/Vis.:  $\lambda_{max}$ : 244 nm  
Supplied as: A crystalline solid  
Storage:  $-20^{\circ}C$   
Stability:  $\geq 2$  years



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

### Laboratory Procedures

GK241 is supplied as a crystalline solid. A stock solution may be made by dissolving the GK241 in the solvent of choice, which should be purged with an inert gas. GK241 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of GK241 in ethanol and DMSO is approximately 1 and 2 mg/ml, respectively. GK241 is slightly soluble in DMF.

### Description

GK241 is a secretory phospholipase  $A_2$  (sPLA<sub>2</sub>) (Type IIA) inhibitor ( $IC_{50}$ s = 0.143 and 0.068  $\mu M$  for the human and mouse enzymes, respectively).<sup>1,2</sup> It inhibits IL-1 $\beta$ -induced production of prostaglandin  $E_2$  (PGE<sub>2</sub>; Item No. 14010) in isolated rat renal mesangial cells when used at concentrations of 3 and 10  $\mu M$ .<sup>3</sup> GK241 also inhibits the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) main protease (M<sup>pro</sup>), also known as 3C-like protease (3CL<sup>pro</sup>;  $IC_{50}$  = 24  $\mu M$ ).<sup>1</sup>

### References

1. Theodoropoulou, M.A., Koutoulogenis, G.S., Zhang, L., *et al.* Identification of a dual inhibitor of secreted phospholipase  $A_2$  (GIIA sPLA<sub>2</sub>) and SARS-CoV-2 main protease. *Pharmaceuticals (Basel)* **15**(8), 961 (2021).
2. Vasilakaki, S., Barbayianni, E., Leonis, G., *et al.* Development of a potent 2-oxoamide inhibitor of secreted phospholipase  $A_2$  guided by molecular docking calculations and molecular dynamics simulations. *Bioorg. Med. Chem.* **24**(8), 1683-1695 (2016).
3. Vasilakaki, S., Barbayianni, E., Magrioti, V., *et al.* Inhibitors of secreted phospholipase  $A_2$  suppress the release of PGE<sub>2</sub> in renal mesangial cells. *Bioorg. Med. Chem.* **24**(13), 3029-3034 (2016).

#### 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, 10/06/2022

#### 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