# PRODUCT INFORMATION



LY311727

Item No. 17973

CAS Registry No.: 164083-84-5

Formal Name: P-[3-[[3-(2-amino-2-oxoethyl)-2-

ethyl-1-(phenylmethyl)-1H-indol-

5-yl]oxy]propyl]-phosphonic acid

MF:  $C_{22}H_{27}N_2O_5P$ 

FW: 430.4 **Purity:** ≥95%

UV/Vis.:  $\lambda_{\text{max}}$ : 225, 283 nm Supplied as: A crystalline 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**

LY311727 is supplied as a crystalline solid. A stock solution may be made by dissolving the LY311727 in the solvent of choice. LY311727 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of LY311727 in these solvents is approximately 30 mg/ml. Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of LY311727 can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of LY311727 in PBS, pH 7.2, is approximately 2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

## Description

Secreted phospholipase A2 (sPLA2) isoforms are low molecular weight, millimolar calcium-dependent enzymes that hydrolyze the fatty acid from the sn-2 position of membrane phospholipids. Group IIA sPLA<sub>2</sub>, also known as sPLA<sub>2</sub>IIA and non-pancreatic sPLA<sub>2</sub>, has roles in the regulation of eicosanoid synthesis and may modulate inflammatory signaling. 1,2 LY311727 is an inhibitor of Group IIA sPLA<sub>2</sub>  $(IC_{50} = 0.47 \mu M)$  that interacts with the active site of the enzyme in a non-covalent manner.<sup>2,3</sup> It shows greater than 1,500-fold selectivity over pancreatic sPLA2 (Group IB sPLA2).3 LY311727 is commonly used to distinguish the actions of Group IIA sPLA<sub>2</sub> from those of other sPLA<sub>2</sub> isoforms in biological systems.<sup>4-7</sup>

### References

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- 2. Dong, C.-Z., Romieu, A., Heymans, F., et al. Biochem. J. 365, 505-511 (2002).
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- 4. Hurt-Camejo, E., Andersen, S., Standal, R., et al. Arterioscler. Thromb. Vasc. Biol. 17, 300-309 (1997).
- 5. Thommesen, L., Sjursen, W., Gåsvik, K., et al. J. Immunol. 161, 3421-3430 (1998).
- 6. Shinohara, H., Balboa, M.A., Johnson, C.A., et al. J. Biol. Chem. 274(18), 12263-12268 (1999).
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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.

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