

## **Data Sheet**

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 Product Name
 :
 Ki16425

 Cat. No.
 :
 PC-43463

 CAS No.
 :
 355025-24-0

 Molecular Formula
 :
 C<sub>23</sub>H<sub>23</sub>CIN<sub>2</sub>O<sub>5</sub>S

Molecular Weight: 474.96

Target : Lysophospholipid Receptor

**Solubility** : 10 mM in DMSO

## **Biological Activity**

Ki16425 (Debio 0719) is a potent, subtype-selective, competitive antagonist of **lysophosphatidic acid receptor** LPA1, LPA2 and LPA3 with Ki of  $0.34 \mu M$ ,  $6.5 \mu M$  and  $0.93 \mu M$ , shows no activity at LPA4, LPA5, LPA6.

Ki16425 inhibits the LPA-induced response in the decreasing order of LPA1>LPA3>LPA2, inhibits LPA-induced guanosine 5'-O-(3-thio)triphosphate binding as well as LPA receptor binding to membrane fractions in intact cells.

Ki16425 also inhibits LPA-induced long-term responses, including DNA synthesis and cell migration in A431 cells, selectively inhibits LPA receptor-mediated actions, especially through LPA1 and LPA3.

Ki16425 reduces both ethanol-induced sedation and ethanol reward in mice, prevents the effects of ethanol on basal c-Fos expression in the medial prefrontal cortex and on adult neurogenesis in the hippocampus.

## References

Ohta H, et al. *Mol Pharmacol*. 2003 Oct;64(4):994-1005.

Yamada T, et al. J Biol Chem. 2004 Feb 20;279(8):6595-605.

Zhao J, et al. *Transl Res.* 2015 Jul;166(1):80-8.

Sánchez-Marín L, et al. Neuropharmacology. 2018 May 1;133:189-201.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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