

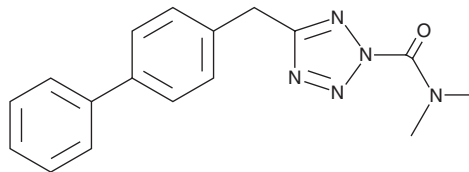
# PRODUCT INFORMATION



## LY2183240 2'-isomer

Item No. 14523

**CAS Registry No.:** 1010096-65-7  
**Formal Name:** 5-([1,1'-biphenyl]-4-ylmethyl)-N,N-dimethyl-2H-tetrazole-2-carboxamide  
**MF:** C<sub>17</sub>H<sub>17</sub>N<sub>5</sub>O  
**FW:** 307.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 251 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

LY2183240 2'-isomer is supplied as a crystalline solid. A stock solution may be made by dissolving the LY2183240 2'-isomer in the solvent of choice. LY2183240 2'-isomer is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of LY2183240 2'-isomer in these solvents is approximately 10, 2, and 3 mg/ml, respectively.

LY2183240 2'-isomer is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, LY2183240 2'-isomer should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. LY2183240 2'-isomer has a solubility of approximately 0.1 mg/ml in a 1:5 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

LY2183240 (Item No. 10008663) is a potent, competitive small molecule inhibitor of anandamide uptake (IC<sub>50</sub> = 270 pM; K<sub>i</sub> = 540 pM) and hydrolysis.<sup>1-3</sup> It has been shown to increase anandamide levels in rat cerebellum (ED<sub>50</sub> = 1.37 mg/kg) and displays dose-dependent efficacy (3-30 mg/kg) in several rodent models of persistent pain.<sup>1</sup> LY2183240 2'-isomer is a less potent, 2,5-regioisomer of LY2183240 that inhibits anandamide hydrolysis and uptake with IC<sub>50</sub> values of 33 and 998 nM, respectively.<sup>2</sup>

### References

1. Moore, S.A., Nomikos, G.G., Dickason-Chesterfield, A.K., *et al.* Identification of a high-affinity binding site involved in the transport of endocannabinoids. *Proc. Natl. Acad. Sci. USA* **102**(49), 17852-17857 (2005).
2. Ortar, G., Cascio, M.G., Moriello, A.S., *et al.* Carbamoyl tetrazoles as inhibitors of endocannabinoid inactivation: A critical revisitation. *Eur. J. Med. Chem.* **43**, 62-72 (2008).
3. Di Marzo, V. Targeting the endocannabinoid system: To enhance or reduce? *Nat. Rev. Drug Discov.* **7**, 438-455 (2008).

#### 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.

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