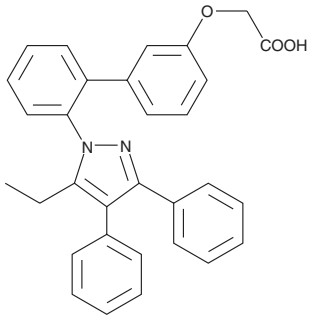
PRODUCT INFORMATION

BMS309403

Item No. 10010206

CAS Registry No.: 300657-03-8
Formal Name: 2-[[2'-(5-ethyl-3,4-diphenyl-1H-pyrazol-1-yl)[1,1'-biphenyl]-3-yl]oxy]-acetic acid
Synonyms: Adipocyte FABP Inhibitor, A-FABP Inhibitor, ALBP Inhibitor, aP2 Inhibitor, FABP4 Inhibitor, Fatty Acid Binding Protein 4 Inhibitor
MF: $C_{31}H_{26}N_2O_3$
FW: 474.6
Purity: ≥98%
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

BMS309403 is supplied as a crystalline solid. A stock solution may be made by dissolving the BMS309403 in the solvent of choice, which should be purged with an inert gas. BMS309403 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of BMS309403 in ethanol and DMF is approximately 30 mg/ml and approximately 25 mg/ml in DMSO.

BMS309403 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BMS309403 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. BMS309403 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Fatty acid binding protein 4 (FABP4) is a lipid transport protein that is also known as adipocyte FABP and aP2. In addition to adipocytes, it is also abundant in macrophages, along with FABP5, the epidermal FABP.[1] BMS309403 is a cell-permeable, potent inhibitor of FABP4 that targets the fatty acid-binding pocket (K_i < 2 nM).[2] It is less effective against FABP3 and FABP5 (K_is = 250 and 350 nM, respectively).[2] BMS309403 is orally active, reducing atherosclerosis in mice lacking apolipoprotein E.[3-4] It also protects against the development of insulin resistance associated with genetic or diet-induced obesity in mice.[3,5] FABP4 dose-dependently suppresses the release of MCP-1 from macrophages.[1,5]

References

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2. Sulsky, R., Magnin, D.R., Huang, Y., *et al. Bioorg. Med. Chem. Lett.* **17(12)**, 3511-3515 (2007).
3. Furuhashi, M., Tuncman, G., Görgün, C.Z., *et al. Nature* **447**, 959-965 (2007).
4. Lee, M.Y., Li, H., Xiao, Y., *et al. Br. J. Pharmacol.* **162(7)**, 1564-1576 (2011).
5. Suhre, K., Römisch-Margl, W., de Angelis, M.H., *et al. J. Biomol. Screen.* **16(5)**, 467-475 (2011).

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