

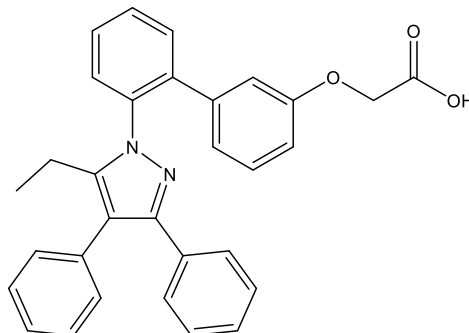
**Catalog # 10-4762**

**BMS-309403**

CAS# 300657-03-8

2-[3-[2-(5-Ethyl-3,4-diphenylpyrazol-1-yl)phenyl]phenoxy]acetic acid

Lot # FBS2056



BMS-309403 is a potent ( $K_i < 2$  nM FABP4,  $K_i = 250$  nM FABP3,  $K_i = 350$  nM FABP5) and selective inhibitor of the fatty-acid-binding protein aP2 (FABP4).<sup>1,2</sup> It demonstrated marked reductions in atherosclerotic lesions in an *ApoE*<sup>-/-</sup> mouse model and improved glucose metabolism, reduced inflammation, and increased insulin sensitivity in a *Lep*<sup>ob/ob</sup> mouse model. BMS-309403 stimulated glucose uptake in myotubes via activation of AMPK.<sup>3</sup> It decreased ER stress-associated inflammation in skeletal muscle<sup>4</sup> and suppressed inflammation and oxidative stress in mouse and cell models of acute lung injury<sup>5</sup>.

- 1) Furuhashi *et al.* (2007), *Treatment of diabetes and atherosclerosis by inhibiting fatty-acid-binding protein aP2*; Nature **447** 959
- 2) Sulsky *et al.* (2007), *Potent and selective biphenylazole inhibitors of adipocyte fatty acid binding protein (aFABP)*; Bioorg. Med. Chem. Lett., **17** 3511
- 3) Lin *et al.* (2012), *BMS309403 stimulates glucose uptake in myotubes through activation of AMP-activated protein kinase*; PLoS One, **7** e44570
- 4) Bosquet *et al.* (2018), *FABP4 inhibitor BMS3409403 decreases saturated-fatty-acid-induced endoplasmic reticulum stress-associated inflammation in skeletal muscle by reducing p38 MAPK activation*; Biochim. Biophys. Acta Mol. Cell Biol. Lipids, **1863** 604
- 5) Gongl *et al.* (2018), *FABP4 inhibitors suppress inflammation and oxidative stress in murine and cell models of acute lung injury*; Biochem. Biophys. Res. Commun., **496** 1115

**PHYSICAL DATA**

Molecular Weight:	474.55
Molecular Formula:	C <sub>31</sub> H <sub>26</sub> N <sub>2</sub> O <sub>3</sub>
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml)
Physical Description:	off-white to pale yellow solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**