

PRODUCT INFORMATION

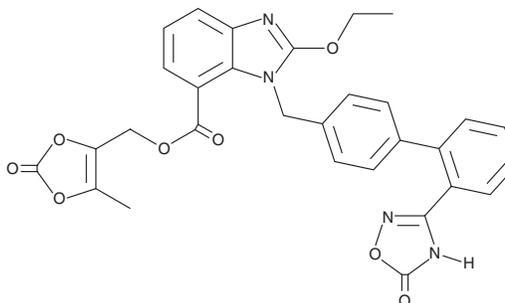


Azilsartan Medoxomil

Item No. 23805

CAS Registry No.: 863031-21-4
Formal Name: 1-[[2'-(2,5-dihydro-5-oxo-1,2,4-oxadiazol-3-yl)[1,1'-biphenyl]-4-yl]methyl]-2-ethoxy-1H-benzimidazole-7-carboxylic acid, (5-methyl-2-oxo-1,3-dioxol-4-yl)methyl ester

Synonym: TAK-491
MF: C₃₀H₂₄N₄O₈
FW: 568.5
Purity: ≥98%
Supplied as: A 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

Azilsartan medoxomil is supplied as a solid. A stock solution may be made by dissolving the azilsartan medoxomil in the solvent of choice, which should be purged with an inert gas. Azilsartan medoxomil is slightly soluble in DMSO and methanol.

Description

Azilsartan medoxomil is a prodrug form of azilsartan (Item No. 26091), a potent and selective angiotensin II receptor 1 (AT₁) antagonist.^{1,2} Azilsartan medoxomil (0.1-10 mg/kg) reduces blood pressure and decreases plasminogen activator inhibitor 1 (PAI-1) levels in the plasma, left ventricle, and aortic wall in mice in a dose-dependent manner.² It also inhibits the pressor response induced by angiotensin II (Item No. 17150) in normotensive rats (ID₅₀ = 0.12 mg/kg) and reduces blood pressure and improves glucose infusion, a marker of insulin sensitivity, in spontaneously hypertensive rats.³ Azilsartan medoxomil also has more potent antiproteinuric effects in Wistar fatty rats than olmesartan medoxomil (Item No. 11614). Formulations containing azilsartan medoxomil have been used in the treatment of hypertension.

References

1. Ojima, M., Igata, H., Tanaka, M., *et al.* In vitro antagonistic properties of a new angiotensin type 1 receptor blocker, azilsartan, in receptor binding and function studies. *J. Pharmacol. Exp. Ther.* **336**(3), 801-808 (2011).
2. French, C.J., Zaman, A.K., and Sobel, B.E. The angiotensin receptor blocker, azilsartan medoxomil (TAK-491), suppresses vascular wall expression of plasminogen activator inhibitor type-I protein potentially facilitating the stabilization of atherosclerotic plaques. *J. Cardiovasc. Pharmacol.* **58**(2), 143-148 (2011).
3. Kusumoto, K., Igata, H., Ojima, M., *et al.* Antihypertensive, insulin-sensitising and renoprotective effects of a novel, potent and long-acting angiotensin II type 1 receptor blocker, azilsartan medoxomil, in rat and dog models. *Eur. J. Pharmacol.* **669**(1-3), 84-93 (2011).

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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