

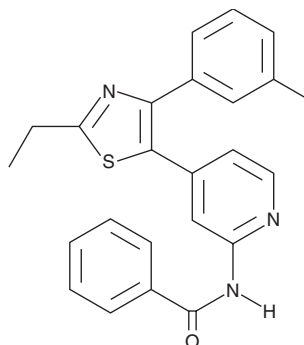
PRODUCT INFORMATION



TAK-715

Item No. 26170

CAS Registry No.: 303162-79-0
Formal Name: N-[4-[2-ethyl-4-(3-methylphenyl)-5-thiazolyl]-2-pyridinyl]-benzamide
MF: C₂₄H₂₁N₃OS
FW: 399.5
Purity: ≥95%
UV/Vis.: λ_{max}: 236, 296 nm
Supplied as: A crystalline 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

TAK-715 is supplied as a crystalline solid. A stock solution may be made by dissolving the TAK-715 in the solvent of choice, which should be purged with an inert gas. TAK-715 is soluble in organic solvents such as ethanol and DMSO. The solubility of TAK-715 in these solvents is approximately 15 and 80 mg/ml, respectively.

Description

TAK-715 is an inhibitor of p38α MAPK (IC₅₀ = 7.1 nM).¹ It is selective for p38α over p38β (IC₅₀ = 200 nM), as well as over p38γ/δ, JNK, ERK1, IKKβ, MEKK1, and TAK1 (IC₅₀ = >10 μM for all) but also inhibits casein kinase Iδ (CK1δ) and CK1ε.^{1,2} It inhibits TNF-α release induced by LPS from THP-1 cells (IC₅₀ = 48 nM) and inhibits LPS-induced TNF-α production by 87.6% in mice when administered at a dose of 10 mg/kg.¹ TAK-715 (30 mg/kg) reduces adjuvant-induced paw swelling in a rat model of rheumatoid arthritis. It also inhibits phosphorylation of human Disheveled 2 (hDvl2) by Wnt3a in a p38α-independent manner.²

References

1. Miwatashi, S., Arikawa, Y., Kotani, E., *et al.* Novel inhibitor of p38 MAP kinase as an anti-TNF-α drug: Discovery of N-[4-[2-ethyl-4-(3-methylphenyl)-1,3-thiazol-5-yl]-2-pyridyl]benzamide (TAK-715) as a potent and orally active anti-rheumatoid arthritis agent. *J. Med. Chem.* **48**(19), 5966-5979 (2005).
2. Verkaar, F., van der Stelt, M., Blankesteyn, W.M., *et al.* Discovery of novel small molecule activators of β-catenin signaling. *PLoS One* **6**(4), 1-7 (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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