

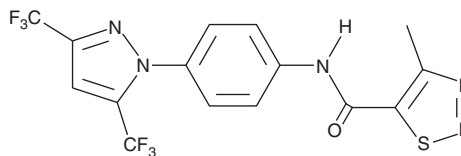
PRODUCT INFORMATION



YM-58483

Item No. 13246

CAS Registry No.: 223499-30-7
Formal Name: N-[4-[3,5-bis(trifluoromethyl)-1H-pyrazol-1-yl]phenyl]-4-methyl-1,2,3-thiadiazole-5-carboxamide
Synonym: BTP 2
MF: C₁₅H₉F₆N₅OS
FW: 421.3
Purity: ≥98%
UV/Vis.: λ_{max}: 275 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

YM-58483 is supplied as a crystalline solid. A stock solution may be made by dissolving the YM-58483 in the solvent of choice, which should be purged with an inert gas. YM-58483 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of YM-58483 in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

Calcium release-activated calcium (CRAC) channels mediate sustained calcium influx in electrically non-excitabile cells. CRAC channels are activated by the release of calcium from intracellular stores, as induced by inositol trisphosphate. CRAC channel activation is essential for the activation of leukocytes and the production of cytokines and inflammatory mediators. YM-58483 is a potent inhibitor of CRAC channels, blocking thapsigargin-induced sustained calcium influx, Th2 cytokine production, and NF-AT-driven promoter activity in T lymphocytes (IC₅₀ = 100 nM).¹ YM-58483 also inhibits lung interleukin-4 and cysteinyl leukotriene generation as well as airway eosinophil infiltration in animal models of asthma.²

References

1. Ishikawa, J., Ohga, K., Yoshino, T., *et al.* A pyrazole derivative, YM-58483, potently inhibits store-operated sustained Ca²⁺ influx and IL-2 production in T lymphocytes. *J. Immunol.* **170(9)**, 4441-4449 (2003).
2. Yoshino, T., Ishikawa, J., Ohga, K., *et al.* YM-58483, a selective CRAC channel inhibitor, prevents antigen-induced airway eosinophilia and late phase asthmatic responses via Th2 cytokine inhibition in animal models. *Eur. J. Pharmacol.* **560(2-3)**, 225-233 (2007).

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.

WARRANTY AND LIMITATION OF REMEDY

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