

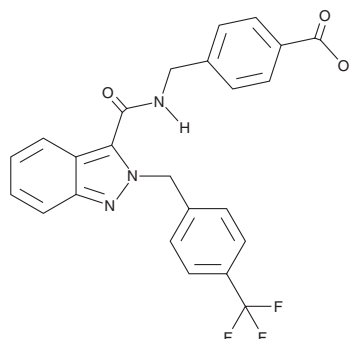
PRODUCT INFORMATION



EP₄ Antagonist 14

Item No. 38427

CAS Registry No.: 3035217-40-1
Formal Name: 4-[[[2-[[4-(trifluoromethyl)phenyl]methyl]-2H-indazol-3-yl]carbonyl]amino]methyl]-benzoic acid
Synonyms: PGE₂ Receptor 4 Antagonist 14, Prostaglandin E₂ Receptor 4 Antagonist 14
MF: C₂₄H₁₈F₃N₃O₃
FW: 453.4
Purity: ≥95%
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

EP₄ antagonist 14 is supplied as a solid. A stock solution may be made by dissolving the EP₄ antagonist 14 in the solvent of choice, which should be purged with an inert gas. EP₄ antagonist 14 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of EP₄ antagonist 14 in these solvents is approximately 20 mg/ml.

Description

EP₄ antagonist 14 is an antagonist of the prostaglandin E₂ (PGE₂) receptor subtype EP₄ with an IC₅₀ value of 1.1 nM in a reporter assay using HEK293 cells expressing the human receptor.¹ It inhibits PGE₂-induced β-arrestin recruitment in the same cells (IC₅₀ = 0.9 nM). EP₄ antagonist 14 (10 μM) decreases PGE₂-induced expression of mRNA encoding IL-4, macrophage mannose receptor 1 (Mrc1), chitinase-like protein 3 (Chil3), chemokine (C-X-C) motif ligand 1 (Cxcl1), triggering receptor expressed on myeloid cells 2 (Trem2), and arginase-1 (Arg1), in RAW 264.7 macrophages. *In vivo*, EP₄ antagonist 14 (30 mg/kg per day), in combination with an anti-PD-1 antibody, inhibits tumor growth and increases infiltration of CD8⁺ T cells into tumors in a CT26 murine colon cancer model.

Reference

1. Cheng, Z., Wang, Y., Zhang, Y., *et al.* Discovery of 2H-indazole-3-carboxamide derivatives as novel potent prostanoid EP4 receptor antagonists for colorectal cancer immunotherapy. *J. Med. Chem.* **66**(9), 6218-6238 (2023).

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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