

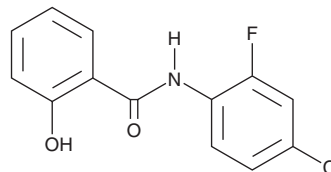
PRODUCT INFORMATION



NDMC101

Item No. 20468

CAS Registry No.: 1308631-40-4
Formal Name: N-(4-chloro-2-fluorophenyl)-2-hydroxy-benzamide
MF: C₁₃H₉ClFNO₂
FW: 265.7
Purity: ≥98%
UV/Vis.: λ_{max}: 272, 290 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

NDMC101 is supplied as a crystalline solid. A stock solution may be made by dissolving the NDMC101 in the solvent of choice, which should be purged with an inert gas. NDMC101 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of NDMC101 in these solvents is approximately 30 mg/ml.

NDMC101 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, NDMC101 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. NDMC101 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

NDMC101 is a derivative of salicylanilide with anti-inflammatory activities.¹ It inhibits RANKL-induced osteoclast differentiation of bone marrow-derived macrophages (BMDMs) and RAW 264.7 cells when used at concentrations of 10 and 15 μM. NDMC101 (15 μM) decreases RANKL-induced expression of the osteoclastogenic genes *Nfatc1*, *Acp5*, *Ctsk*, *Oscar*, *Itgb3*, and *Dcstamp* in BMDMs and inhibits phosphorylation of IκB and nuclear translocation of NF-κB in RANKL-stimulated RAW 264.7 cells. It reduces collagen-induced increases in the serum levels of TNF-α and IL-1β, as well as the numbers of osteoclasts and histological severity of bone erosion, cartilage damage, and synovial inflammation in joints in a mouse model of arthritis when used at a concentration of 62.5 mg/kg.

Reference

1. Cheng, C.P., Huang, H.S., Hsu, Y.C., *et al.* A benzamide-linked small molecule NDMC101 inhibits NFATc1 and NF-κB activity: A potential osteoclastogenesis inhibitor for experimental arthritis. *J. Clin. Immunol.* **32**(4), 762-777 (2012).

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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