

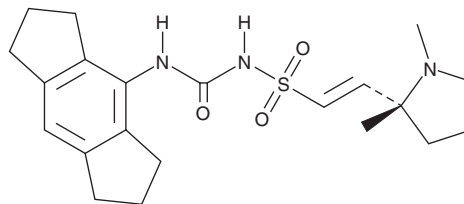
PRODUCT INFORMATION



Usnoflast

Item No. 45301

CAS Registry No.: 2455519-86-3
Formal Name: 2-[(2R)-1E,2-dimethyl-2-pyrrolidinyl]-N-[[[(1,2,3,5,6,7-hexahydro-s-indacen-4-yl)amino]carbonyl]-ethenesulfonamide
Synonym: ZYIL1
MF: C₂₁H₂₉N₃O₃S
FW: 403.5
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

Usnoflast is supplied as a solid. A stock solution may be made by dissolving the usnoflast in the solvent of choice, which should be purged with an inert gas. Usnoflast is slightly soluble (0.1-1 mg/ml) in acetonitrile:water (1:1) and water.

Description

Usnoflast is an inhibitor of the NOD-like receptor protein 3 (NLRP3) inflammasome.¹ It inhibits oligomerization of apoptosis-associated speck-like protein (ASC), a component of the NLRP3 inflammasome complex, in LPS-primed and ATP-activated THP-1 cells. Usnoflast reduces IL-1 β release induced by nigericin (Item No. 11437) in LPS-primed THP-1 cells and microglia (IC₅₀s = 11 and 43 nM, respectively). It also reduces ATP-induced IL-1 β release in LPS-primed human peripheral blood mononuclear cells (PBMCs; IC₅₀ = 4.5 nM). Usnoflast (30 mg/kg) improves motor function and reduces brain α -synuclein levels in a mouse model of Parkinson's disease induced by 6-OHDA (Item No. 25330).

Reference

1. Chatterjee, A., Mohapatra, J., Sharma, M., *et al.* A novel selective NLRP3 inhibitor shows disease-modifying potential in animal models of Parkinson's disease. *Brain Res.* **1842**, 149129 (2024).

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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