

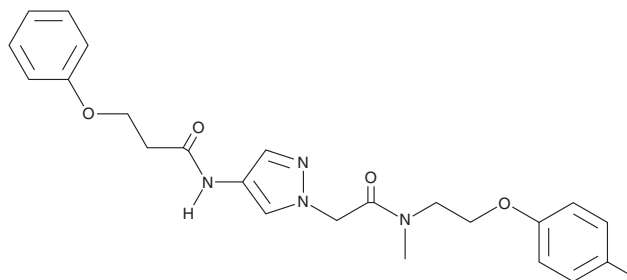
PRODUCT INFORMATION



IXA4

Item No. 36788

CAS Registry No.: 1185329-96-7
Formal Name: N-methyl-N-[2-(4-methylphenoxy)ethyl]-4-[(1-oxo-3-phenoxypropyl)amino]-1H-pyrazole-1-acetamide
MF: C₂₄H₂₈N₄O₄
FW: 436.5
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

IXA4 is supplied as a solid. A stock solution may be made by dissolving the IXA4 in the solvent of choice, which should be purged with an inert gas. IXA4 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of IXA4 in these solvents is approximately 10 and 16 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of IXA4 can be prepared by directly dissolving the solid in aqueous buffers. The solubility of IXA4 in PBS (pH 7.2) is approximately 0.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

IXA4 is an activator of inositol-requiring enzyme 1 (IRE1).¹ It induces the expression of the Ire1 target *Xbp1s* in primary mouse hepatocytes. *In vivo*, IXA4 (50 mg/kg) decreases hepatic expression of the Xbp1 target gene *Dnajb9* in wild-type mice and a mouse model of high-fat diet-induced obesity, effects that can be reversed by the IRE1 inhibitor STF-083010 (Item No. 17370). IXA4 also increases glucose tolerance and suppresses hepatic gluconeogenesis and steatosis in a mouse model of high-fat diet-induced obesity.

Reference

1. Madhavan, A., Kok, B.P., Rius, B., *et al.* Pharmacologic IRE1/XBP1s activation promotes systemic adaptive remodeling in obesity. *Nat. Commun.* **13**(1), 608 (2022).

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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