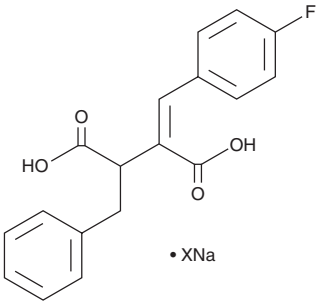
PRODUCT INFORMATION

IRG1-IN-1 (sodium salt)

Item No. 46494

Formal Name:	2-[(4-fluorophenyl)methylene]-3-(phenylmethyl)-butanedioic acid, sodium salt
Synonyms:	Immune-reponsive Gene Protein 1-IN-1, Immune-responsive Gene Protein 1 Inhibitor 1, IRG1 Inhibitor 1
MF:	$C_{18}H_{15}FO_4$ • XNa
FW:	314.3
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

IRG1-IN-1 (sodium salt) is supplied as a solid. A stock solution may be made by dissolving the IRG1-IN-1 (sodium salt) in the solvent of choice, which should be purged with an inert gas. IRG1-IN-1 (sodium salt) is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

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 IRG1-IN-1 (sodium salt) can be prepared by directly dissolving the solid in aqueous buffers. IRG1-IN-1 (sodium salt) is sparingly soluble (1-10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

IRG1-IN-1 is an inhibitor of *cis*-aconitate decarboxylase 1 (ACOD1), also known as immune-responsive gene 1 protein (IRG1).[1] It decreases levels of the ZFTA-RELA fusion protein that contains zinc finger translocation-associated protein (ZFTA) and p65, which is encoded by *RELA* in humans, in mouse neuronal stem cells (mNSCs) expressing ZFTA-RELA. It reduces intratumoral ZFTA-RELA levels and tumor growth in a patient-derived xenograft (PDX) model of ZFTA-RELA$^+$ ependymoma.

Reference

1. Natarajan, S.K., Lum, J., Skeans, J.H., *et al*. ZFTA-RELA ependymomas make itaconate to epigenetically drive fusion expression. *Nature* **652(8111)**, 1004-1015 (2026).

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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