

PRODUCT INFORMATION



Glutaminase-IN-1

Item No. 42339

CAS Registry No.: 2247127-79-1
Formal Name: N-[5-[4-[6-[[2-[3-(trifluoromethoxy)phenyl]acetyl]amino]-3-pyridazinyl]butyl]-1,3,4-selenadiazol-2-yl]-2-pyridineacetamide

Synonyms: GLS-IN-1, GLS Inhibitor 1, Glutaminase Inhibitor 1

MF: C₂₆H₂₄F₃N₇O₃Se

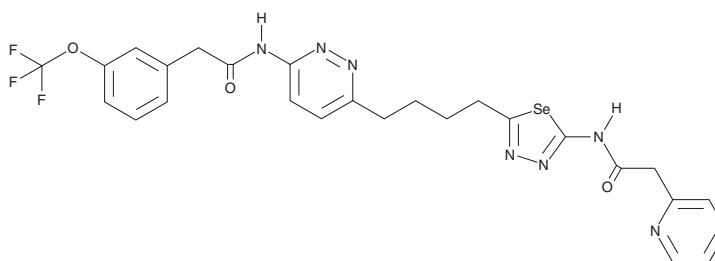
FW: 618.5

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

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

Description

Glutaminase-IN-1 is an inhibitor of glutaminase 1 (GLS1), also known as kidney-type (K-type) glutaminase (IC₅₀ = 1 nM) and a selenium-containing derivative of CB-839 (Item No. 22038).¹ It is selective for GLS1 over glutamate dehydrogenase (GDH; IC₅₀ = >13 μM). It inhibits the proliferation of A549 lung, H22 liver, Caki-1 kidney, and HCT116 colon cancer cells (IC₅₀s = 0.017, 6.78, 0.019, and 0.009 μM, respectively). Glutaminase-IN-1 (10 μM) induces the production of reactive oxygen species (ROS) in A549 cells. It decreases tumor weight in an HCT116 mouse xenograft model when administered at a dose of 10 mg/kg.

Reference

1. Chen, Z., Li, D., Xu, N., *et al.* Novel 1,3,4-selenadiazole-containing kidney-type glutaminase inhibitors showed improved cellular uptake and antitumor activity. *J. Med. Chem.* **62**(2), 589-603 (2019).

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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