# PRODUCT INFORMATION



## Se-Aspirin

Item No. 19315

CAS Registry No.: 1850293-95-6 Formal Name: selenocyanic acid,

2-[[2-(acetyloxy)benzoyl]amino]

ethyl ester

Synonym: Selenium-Acetylsalicylic Acid

MF:  $C_{12}H_{12}N_2O_3Se$ 

FW: 311.2 **Purity:** ≥98%

Supplied as: A crystalline solid

-20°C Storage:

As supplied, 2 years from the QC date provided on the Certificate of Analysis, when Stability:

stored properly

### **Laboratory Procedures**

Se-Aspirin is supplied as a crystalline solid. A stock solution may be made by dissolving the Se-Aspirin in the solvent of choice. Se-Aspirin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of Se-Aspirin in these solvents is approximately 10, 30, and 50 mg/ml, respectively.

Se-Aspirin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Se-Aspirin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Se-Aspirin has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Se-Aspirin is a hybrid of selenium and a nonsteroidal anti-inflammatory drug that has been shown to reduce the viability of different cancer cell lines, particularly colorectal cancer (CRC) cells ( $IC_{50} = 3.4 \mu M$ ). It can inhibit the cell cycle in G<sub>1</sub> and G<sub>2</sub>/M phases and induce apoptosis by activating caspase 3/7 and PARP cleavage. Long-term exposure to Se-Aspirin is reported to cause an increase in intracellular reactive oxygen species levels in CRC cells.1

#### Reference

1. Plano, D., Karelia, D.N., Pandey, M.K., et al. Design, synthesis, and biological evaluation of novel selenium (Se-NSAID) molecules as anticancer agents. J. Med. Chem. 59(5), 1946-1959 (2016).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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