Product Data Sheet

Product Name: Se-Aspirin
Cat. No.: GC15267

Chemical Properties

Cas. No.	1850293-95-6		
Chemical Name	selenocyanic acid, 2-[[2-(acetyloxy)benzoyl]amino]ethyl ester		
SMILES	O=C(C)OC1=CC=CC=C1C(NCC[Se]C#N)=O		
Formula	$C_{12}H_{12}N_2O_3Se$	M.Wt	311.2
Solubility	≤10mg/ml in ethanol;30mg/ml in DMSO;50mg/ml in dimethyl formamide	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Se-Aspirin		

Background

Se-Aspirin is a novel selenium-nonsteroidal anti-inflammatory drug (Se-NSAID) [1].

NSAIDs have demonstrated intestinal antineoplastic effects in various animal intestinal cancer models. Selenium (Se) compounds have attracted a vast interest as promising chemo-preventive agents. Several epidemiological studies have reported an inverse association between the nutritional Se status and cancer risk. Se functioned as chemo-preventive agent for cancer therapy in the past few years.

Se-Aspirin was a hybrid of selenium and a nonsteroidal anti-inflammatory drug. t Se-Aspirin reduced the viability of different cancer cell lines, particularly colorectal cancer (CRC) cells with the IC50 value of 3.4 μM. Se-Aspirin inhibited the cell cycle in G1 and G2/M phases and induced apoptosis by activating caspase 3/7 and PARP cleavage. Long-term exposure to Se-Aspirin has been reported to cause an increase in intracellular reactive oxygen species levels in CRC cells [1].

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

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]. Journal of medicinal chemistry, 2016, 59(5): 1946-1959.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA