

**Product Name** : Acalisib  
**Synonyms** : GS-9820;GS9820;GS 9820;CAL-120;CAL120;CAL 120

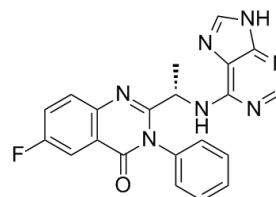
**Cat No.** : M16322

**CAS Number** : 870281-34-8

**Molecular Formula** : C<sub>21</sub>H<sub>16</sub>FN<sub>7</sub>O

**Formula Weight** : 401.40

**Chemical Name** : 4(3H)-Quinazolinone, 6-fluoro-3-phenyl-2-[(1S)-1-(9H-purin-6-ylamino)ethyl]-



**Description** : Acalisib (GS-9820, CAL-120) is a potent, isoform-selective PI3K p110 $\delta$  with IC<sub>50</sub> of 12.7 nM, displays >100-fold selectivity over P110 $\alpha/\beta/\gamma$ , and other class II/III PI3Ks, DNA-PK, mTOR; inhibits anti-FCRI PI3K $\delta$  induced CD63 expression with IC<sub>50</sub> of 14 nM in human whole blood with IC<sub>50</sub> of 14 nM; induces osteoclast retraction in rat osteoclasts, disrupts actin belts and blocks RANKL-stimulated osteoclast survival. Blood Cancer Phase 2 Clinical

**Pathway** : PI3K/Akt/mTOR signaling

**Target** : PI3K

**Receptor** : PI3K $\delta$

**Solubility** : DMSO:  $\geq$  29 mg/mL

**SMILES** : O=C1N(C2=CC=CC=C2)C([C@@H](NC3=C4NC=NC4=N3)C)=NC5=C1C=C(F)C=C5

**Storage** : (-20°C)

**Stability** :  $\geq$  2 years

**Reference** :

1. Shugg RP, et al. J Biol Chem. 2013 Dec 6;288(49):35346-57. | 2. Lopez-Guadamillas E, et al. Aging (Albany NY). 2016 Nov 4;8(11):2747-2753. | 3. Kater AP, et al. Blood Cancer J. 2018 Feb 12;8(2):16.