

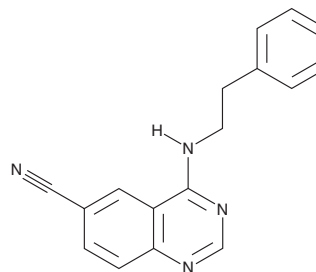
PRODUCT INFORMATION



Senexin A

Item No. 30291

CAS Registry No.: 1366002-50-7
Formal Name: 4-[(2-phenylethyl)amino]-6-quinazolinecarbonitrile
MF: $C_{17}H_{14}N_4$
FW: 274.3
Purity: $\geq 98\%$
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

Senexin A is supplied as a solid. A stock solution may be made by dissolving the senexin A in the solvent of choice, which should be purged with an inert gas. Senexin A is soluble in organic solvents such as acetonitrile and DMSO.

Description

Senexin A is an inhibitor of cyclin-dependent kinase 8 (Cdk8; $IC_{50} = 0.28 \mu\text{M}$).¹ It also inhibits cyclin-dependent kinase inhibitor p21^{WAF1}-induced reporter expression in reporter assay using HT-1080 p21-9 cells ($IC_{50} = 0.68 \mu\text{M}$). Senexin A ($2.5 \mu\text{M}$) prevents 17β -estradiol-induced increases in expression of mRNA encoding gene regulated in breast cancer 1 (GREB1), chemokine (C-X-C motif) ligand 12 (CXCL12), and trefoil factor 1 (TFF1) in estrogen-deprived MCF-7, BT474, and T47D breast cancer cells.² It decreases intracellular and extracellular viral RNA, the number of infectious particles, as well as dengue virus-induced increases in the levels of mRNA encoding LC3-II in dengue virus-infected Huh7 cells when used at a concentration of $25 \mu\text{M}$.³ Senexin A ($12.5 \mu\text{M}$) reduces mitochondrial oxygen consumption rate (OCR) and increases glycolysis in uninfected and dengue virus-infected Huh7 cells.

References

1. Porter, D.C., Farmaki, E., Altília, S., *et al.* Cyclin-dependent kinase 8 mediates chemotherapy-induced tumor-promoting paracrine activities. *Proc. Natl. Acad. Sci. USA* **109**(34), 13799-13804 (2012).
2. McDermott, M.S., Chumanevich, A.A., Lim, C.-U., *et al.* Inhibition of CDK8 mediator kinase suppresses estrogen dependent transcription and the growth of estrogen receptor positive breast cancer. *Oncotarget* **8**(8), 12558-12575 (2017).
3. Butler, M., Chotiwan, N., Brewster, C.D., *et al.* Cyclin-dependent kinases 8 and 19 regulate host cell metabolism during dengue virus serotype 2 infection. *Viruses* **12**(6), 654 (2020).

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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