

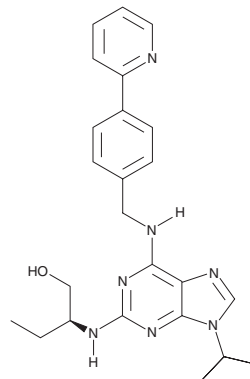
# PRODUCT INFORMATION



## (S)-CR8

Item No. 29985

**CAS Registry No.:** 1084893-56-0  
**Formal Name:** (2S)-2-[[9-(1-methylethyl)-6-[[[4-(2-pyridinyl)phenyl]methyl]amino]-9H-purin-2-yl]amino]-1-butanol  
**MF:** C<sub>24</sub>H<sub>29</sub>N<sub>7</sub>O  
**FW:** 431.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 233, 250, 288 nm  
**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

(S)-CR8 is supplied as a solid. A stock solution may be made by dissolving the (S)-CR8 in the solvent of choice, which should be purged with an inert gas. (S)-CR8 is soluble in organic solvents such as ethanol and DMSO.

### Description

(S)-CR8 is a second generation derivative of (R)-roscovitine (Item No. 10009569) and an inhibitor of cyclin-dependent kinase 1 (Cdk1/cyclin B), Cdk2/cyclin A, Cdk2/cyclin E, Cdk5/p25, and Cdk9/cyclin T (IC<sub>50</sub>s = 0.15, 0.08, 0.06, 0.12, and 0.11 μM, respectively).<sup>1</sup> It also inhibits casein kinase CK1δ/ε (CKδ/ε) and DYRK1A (IC<sub>50</sub>s = 0.61 and 0.9 μM, respectively). (S)-CR8 reduces cell viability in human neuroblastoma cell lines, including SH-SY5Y, SK-N-AS, SK-N-BE, and IMR32 cells (IC<sub>50</sub>s = 0.43, 1.46, 0.13, and 0.14 μM, respectively).<sup>2</sup> It also reduces protein levels of the survival factor Mcl-1 in SH-SY5Y cells.

### References

1. Bettayeb, K., Oumata, N., Echaliier, A., *et al.* CR8, a potent and selective, roscovitine-derived inhibitor of cyclin-dependent kinases. *Oncogene* **27**(44), 5797-5807 (2008).
2. Bettayeb, K., Baunbaek, D., Delehouze, C., *et al.* CDK inhibitors roscovitine and CR8 trigger Mcl-1 down-regulation and apoptotic cell death in neuroblastoma cells. *Genes Cancer* **1**(4), 369-380 (2010).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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