### Product Description

Compound E is a potent, cell-permeable, selective inhibitor that blocks the cleavage of both gamma-secretase and the Notch intracellular domain with similar IC$_{50}$ values, ranging from 0.24 to 0.37 nM (Beher et al.; Seiffert et al.).

**Molecular Name:** Compound E  
**Alternative Names:** γ-Secretase Inhibitor XXI  
**CAS Number:** 209986-17-4  
**Chemical Formula:** C$_2$$_7$H$_2$_4F$_2$N$_4$O$_3$  
**Molecular Weight:** 490.5 g/mol  
**Purity:** ≥ 98%  
**Chemical Name:** N-[(1S)-2-[[3S]-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H,1,4-benzodiazepin-3-yl]amino]-1-methyl-2-oxoethyl]-3,5-difluoro-benzeneacetamide

### Properties

**Physical Appearance:** A crystalline solid  
**Storage:** Product stable at -20°C as supplied. Protect product from prolonged exposure to light. For long-term storage store with a desiccant. Stable as supplied for 12 months from date of receipt.  
**Solubility:**  
- DMSO ≤ 40 mM  
- Absolute ethanol ≤ 4 mM  
  For example, to prepare a 10 mM stock solution in DMSO, resuspend 0.5 mg in 102 μL of DMSO.

Prepare stock solution fresh before use. Information regarding stability of small molecules in solution has rarely been reported, however, as a general guide we recommend storage in DMSO at -20°C. Aliquot into working volumes to avoid repeated freeze-thaw cycles. The effect of storage of stock solution on compound performance should be tested for each application.

For use as a cell culture supplement, stock solution should be diluted into culture medium immediately before use. Avoid final DMSO concentration above 0.1% due to potential cell toxicity.
Published Applications

DIFFERENTIATION
· Inhibits growth, differentiation, and motility of neuroblastoma cells (Ferrari-Toninelli et al.).
· Accelerates the differentiation of human embryonic stem cells into primitive neural stem cells (Li et al.).

References

Related Small Molecules
For a complete list of small molecules available from STEMCELL Technologies, visit www.stemcell.com/smallmolecules or contact us at techsupport@stemcell.com.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2017 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, and Scientists Helping Scientists are trademarks of STEMCELL Technologies Canada Inc. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.