

DATA SHEET

Product Name: DAPT

Catalog #: N-3018

Alt: CAS# 208255-80-5; N-[N-(3,5-Difluorophenacetyl)-L-alanyl]-S-phenylglycine t-butyl ester; LY-374973

Source: Synthetic

Molecular Mass: 432.5 C₂₃H₂₆F₂N₂O₄

Analysis: 98% (TLC); NMR (Conforms)

Supplied As: White powder

Resuspension: May be dissolved in DMSO (30 mg/ml)

Storage: Store as supplied at -20°C for up to 1 year. Solutions in DMSO may be stored at -20°C for up to 3 months.

Description: Inhibitor of γ -secretase (IC₅₀ in human primary neurons = 115 nM for total A β or 200 nM for A β ₄₂ specifically)¹. Oral administration of DAPT has been shown to reduce levels of A β in brain extract, cerebrospinal fluid and plasma from mice and rats.^{2,3} DAPT blocks Notch signaling which promotes neuronal differentiation of precursor cells.⁴ Enhances iPS cells without oncogenes KLF⁴ and CMYC⁵. Cell permeable.

References:

1. Dovey, H.F., et al., (2001) J. Neurochem., 76: 173
2. Portelius, E., et al., (2009) Cell Signal, 5: 615
3. El Mouedden, M., et al., (2006) Curr. Pharma. Des., 12: 1671
4. De Smedt, M., et al., (2005) Blood, 106: 2236
5. Ichida, J.K., et al., (2014) Nature Chem. Biol., 10: 632

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