Product Data Sheet





Product Name DALP

Synonyms (S)-6-Amino-2-(6-(2,4-dinitrophenylamino)hexanamido)-N-(3-

hydroxypropyl)hexanamide trifluoroacetate;

3-[N^α[N^ε-[2', 4'-dinitrophenyl]-amino-n-hexanoyl]-L-lysylamido]-propane-1-ol

Quantity 5 mg

Application Amine donor substrate for transglutaminases. In the parent molecule DALP-methyl

carbamate (D009) the lysine side chain is protected by a carbamoyl moiety rendering the molecule membrane permable. In contrast DALP itself does not show considerable uptake by cells. The K_m of DALP is 3 μ M and therefore about 50 times lower than that of N-biotinylcadaverine (B002). DALP is non-toxic in cell culture below 1 mM. The dinitrophenyl moiety incorporated into substrate proteins can be detected by a suitable

anti-DNP-antibody or by HPLC at 365 nm detection wavelength.

Molecular Formula $C_{23}H_{35}F_3N_6O_9$ (free base: $C_{21}H_{34}N_6O_7$)

Molecular Weight 596.55 (free base: 482.53)

Chemical Structure

Purity by HPLC >95 % (214 nm)

Solubility 25 μM in 0.4% (v/v) DMSO / aqueous buffers

Pre-dissolve e.g. 3.72 mg in 1 ml DMSO (6.25 mM stock) - dilute 1:250 with buffer to

obtain a 25 µM solution.

DMSO-stock-solution can be stored at -20°C for at least 4 weeks.

Appearance Yellow resin-like solid

Storage Store at -20°C, desiccate

Related Products D009 DALP-methyl carbamate

T002 Human tissue transglutaminase (hTG2)

Reference(s) Nemes, Z. Jr. et al. J Biol Chem. **1997**, 272, 20577.

Kiraly, R. et al. FEBS J. 2011, 278, 4717 (Review).

NOTE INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN,

THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.