

Product Data Sheet

Fmoc-Cl

Cat. No.:	A7010
CAS No.:	28920-43-6
Formula:	C ₁₅ H ₁₁ ClO ₂
M.Wt:	258.7
Synonyms:	
Target:	Amino Acids & Building Blocks
Pathway:	N-Protecting Reagents
Storage:	Desiccate at -20°C



Solvent & Solubility

≥25.9 mg/mL in DMSO; insoluble in H₂O; ≥24.32 mg/mL in EtOH with ultrasonic

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		3.8655 mL	19.3274 mL	38.6548 mL
	5 mM		0.7731 mL	3.8655 mL	7.7310 mL
	10 mM		0.3865 mL	1.9327 mL	3.8655 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

solid phase peptide synthesis

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	Ca9-22 cells
Preparation method:	This compound is soluble in water or 1% acetic acid. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.
Reacting conditions:	0.4 μM

	Applications:	Fmoc-based dipeptide significantly inhibited Ca9-22 cells, with an IC50 value of 0.4 μ M. Moreover, this compound had synergistic effect to enhance the antitumor activity of Doxorubicin.
In Vivo	Animal experiment	
	Animal models:	Rats with carcinogen-induced mammary cancer and mice bearing ER+ human breast cancer xenografts
	Dosage form:	0.5 μ g/mouse; i.p.
	Applications:	Peptide derived from Fmoc solid-phase synthesis prevented carcinogen-induced mammary cancer in rats and suppressed the growth of ER+ human breast cancer xenografts in mice.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

- [1]. Yena CT, Wua CC, Leed JC, Chena SL, Morris-Natschkec SL, Hsiehb PW, Wua YC. Cytotoxic N-(fluorenyl-9-methoxycarbonyl) (Fmoc)-dipeptides: Structure–activity relationships and synergistic studies. *Eur J Med Chem.* 2010 Jun; 45(6): 2494-502.
- [2]. Joseph LC, Bennett JA, Kirschner KN, Shields GC, Hughes J, Lostritto N, Jacobsona H, Andersen TT. Antiestrogenic and anticancer activities of peptides derived from the active site of alpha-fetoprotein. *J Pept Sci.* 2009 Feb; 15: 319-25.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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