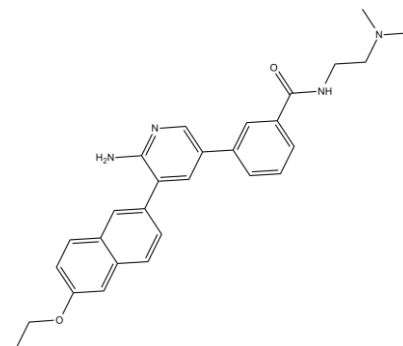


Product Data Sheet

Chemical Properties

Product Name:	CRT5
Cas No.:	1034297-58-9
M.Wt:	454.6
Formula:	C ₂₈ H ₃₀ N ₄ O ₂
Synonyms:	CRT0066051
Chemical Name:	3-[6-amino-5-(6-ethoxy-2-naphthalenyl)-3-pyridinyl]-N-[2-(dimethyl amino)ethyl]-benzamide
Canonical SMILES:	<chem>CCOC1=CC=C2C(C=CC(C3=CC(C4=CC(C(NCCN(C)C)=O)=CC=C4)=CN=C3N)=C2)=C1</chem>
Solubility:	Soluble in DMSO
Storage:	Store at -20°C
General tips:	For obtaining a higher solubility , please warm the tube at 37° C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20° C for several months.
Shopping Condition:	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request



Biological Activity

Targets : Apoptosis

Pathways: PKD

Description:

CRT5 is a novel and specific PKD inhibitor [1]. PKDs (Protein kinase Ds) are DAG (diacylglycerol)-stimulated serine/threonine protein kinases [1]. Three known PKD isoforms have been identified: PKD1–PKD3. PKD acted as a mediator implicated in diverse cellular functions, including proliferation, cellular trafficking, survival and regulation of transcription [1].

In vitro: The non-linear regression analysis revealed that LD50 value of CRT5 was 17 μM. The

biochemical IC50 value of CRT5 for PKD1, PKD2 and PKD3 were 1, 2 and 1.5 nM, respectively [1]. CRT5 (1 μ M) completely inhibited PKD1 and PKD2, but showed little inhibitory effect on the PKC isoforms. CRT5 significantly reduced VEGF-induced phosphorylation of HSP27 at the position Ser82. CRT5 significantly reduced the migratory response towards VEGF by 42–51%. CRT5 decreased the proliferation of control cells not treated with VEGF to a less extent. VEGF increased HUVEC tubule formation in a collagen-based assay. CRT5 markedly inhibited VEGF-induced tubulogenesis [1].

Reference:

[1] Evans I M, Bagherzadeh A, Charles M, et al. Characterization of the biological effects of a novel protein kinase D inhibitor in endothelial cells[J]. *Biochemical Journal*, 2010, 429(3): 565-572.

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 ApexBio 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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