

Data Sheet

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Product Name : PKD inhibitor CRT5

Cat. No. : PC-38466
CAS No. : 1034297-58-9
Molecular Formula : C₂₈H₃₀N₄O₂
Molecular Weight : 454.574

: PKD

Solubility : 10 mM in DMSO

Biological Activity

Target

CRT5 (PKD inhibitor CRT5) is a potent, selective pyrazine benzamide inhibitor of **PKD** (**protein kinase D**), inhibits peptide substrate phosphorylation with IC50 of 1, 2 and 1.5 nM for PKD1, PKD2 and PKD3, respectively.

CRT5 (PKD inhibitor CRT5) displays little inhibitory effect on any of the PKC isoforms tested at 1 uM, as well as a panel of other serine/threonine and tyrosine protein kinases.

CRT5 (5 uM treatment) inhibited VEGF-induced phosphorylation of PKD1 at Ser916 and PKD2 at the corresponding site Ser876 in HUVECs, with no effect on PKD phosphorylation at Ser744/Ser748.

CRT5 (PKD inhibitor CRT5) significantly reduced VEGF-induced HSP27 Ser82 phosphorylation in vitro, as well as VEGF-induced CREB phosphorylation.

CRT5 (PKD inhibitor CRT5) also strongly inhibited VEGF-induced HDAC5 phosphorylation at 5 uM.

CRT5 (PKD inhibitor CRT5) markedly inhibited VEGF-induced migration, proliferation and in vitro angiogenesis.

References

Evans IM, et al. *Biochem J.* 2010 Aug 1;429(3):565-72.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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